













NYC Common Investment Meeting (FIRE)

Public Agenda

Schedule	Friday, September 17, 2021 9:00 AM — 3:00 PM EDT
Venue	Zoom Meeting (Links will be sent out one day in advance of meeting)
Organizer	Kim Boston

Agenda

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PUBLIC SESSION -

Welcome and Opening:

Quarterly Fund Performance Overview:

- Performance Update
- Risk Update

PERFORMANCE REPORTING

2nd Quarter 2021



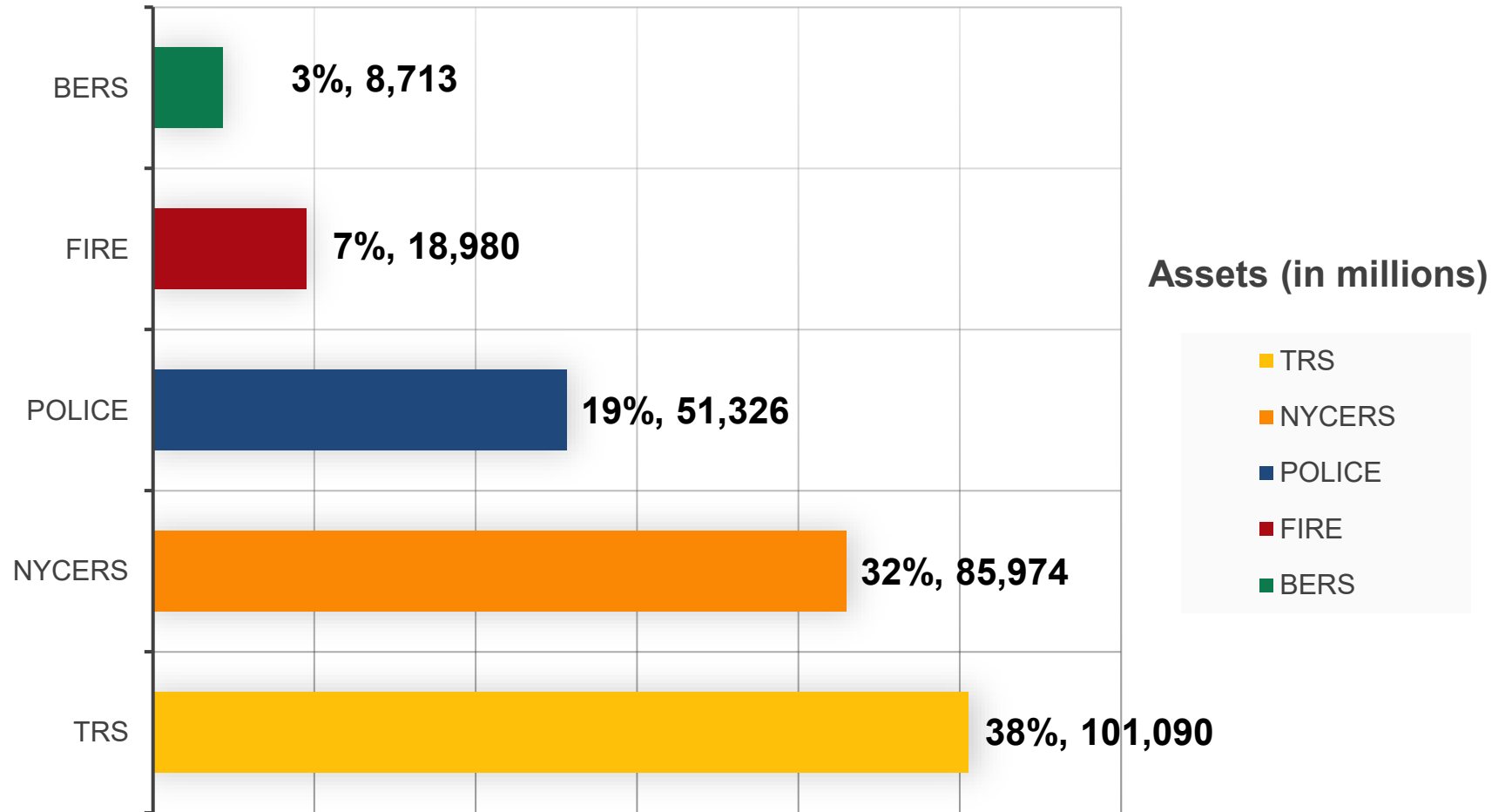
NYC Retirement Systems AUM (% , in millions)

\$266,084m Total AUM for all 5 Systems as of June 30, 2021



**Board of Education
Retirement System**

New York City Fire Pension Fund



Source: State Street

Total NYC Pension Fund Net Performance as of 6/30/21

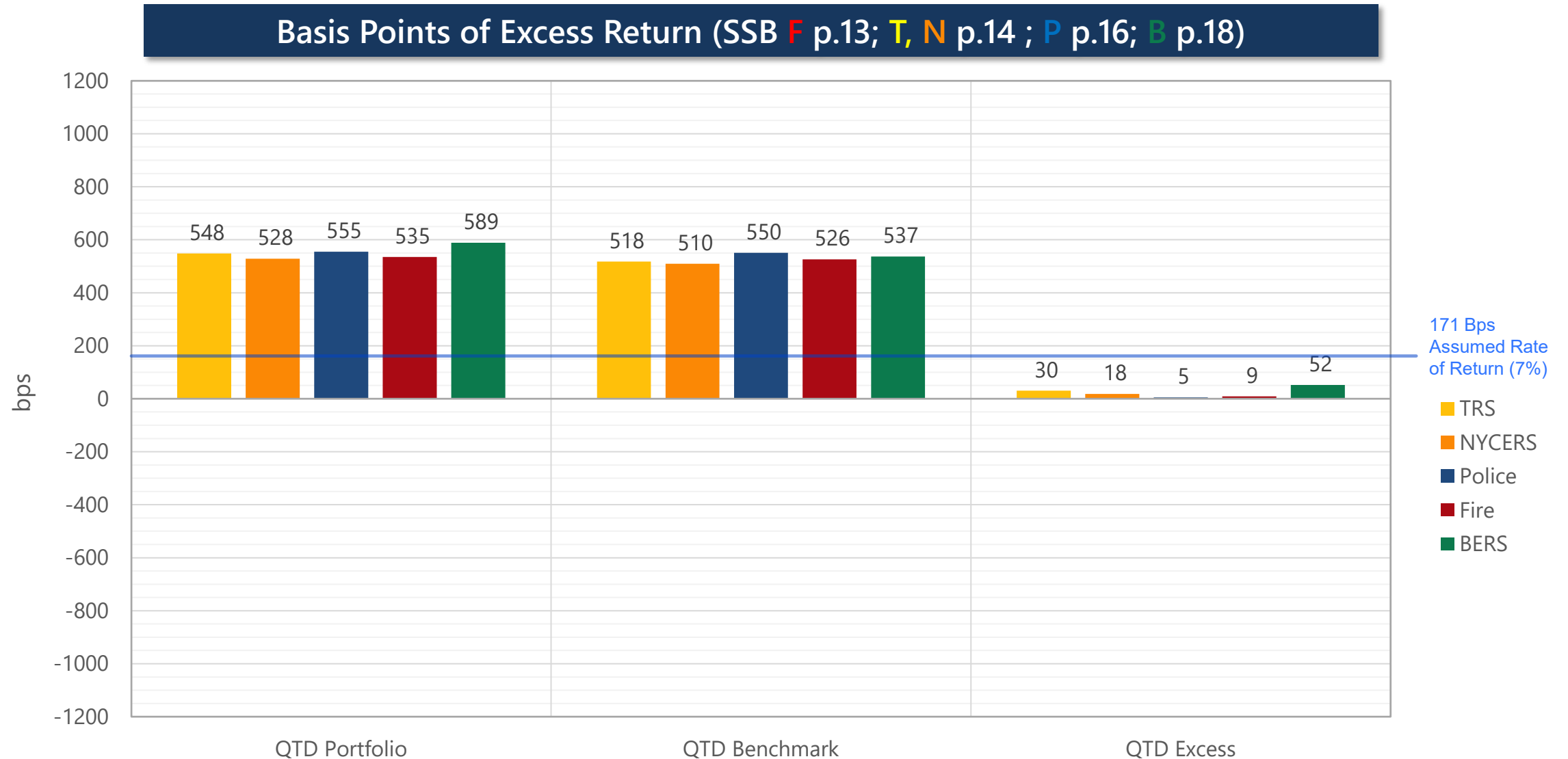
NYC Pension System	Portfolio Std Dev - 1 yr.	3 Month	Fiscal YTD	Three Year Trailing	Five Year Trailing
BERS	8.35	5.89%	27.97%	13.12%	13.00%
NYCERS	8.30	5.28%	26.63%	12.01%	11.50%
POLICE	8.25	5.55%	26.37%	12.26%	11.87%
TRS	8.17	5.48%	24.80%	12.07%	11.39%
FIRE	7.91	5.35%	24.86%	11.92%	11.57%
Public Mkt Equiv 65/35		5.32%	24.77%	12.08%	11.17%
Median Fund - TUCS		5.89%	27.01%	12.00%	11.44%

Net of mgr. fees in public asset classes are recorded on an accrual basis.
Private markets data is reported on a lagged basis.

Source: State Street



Quarter to Date Return as of 6/30/21 – Total Portfolio

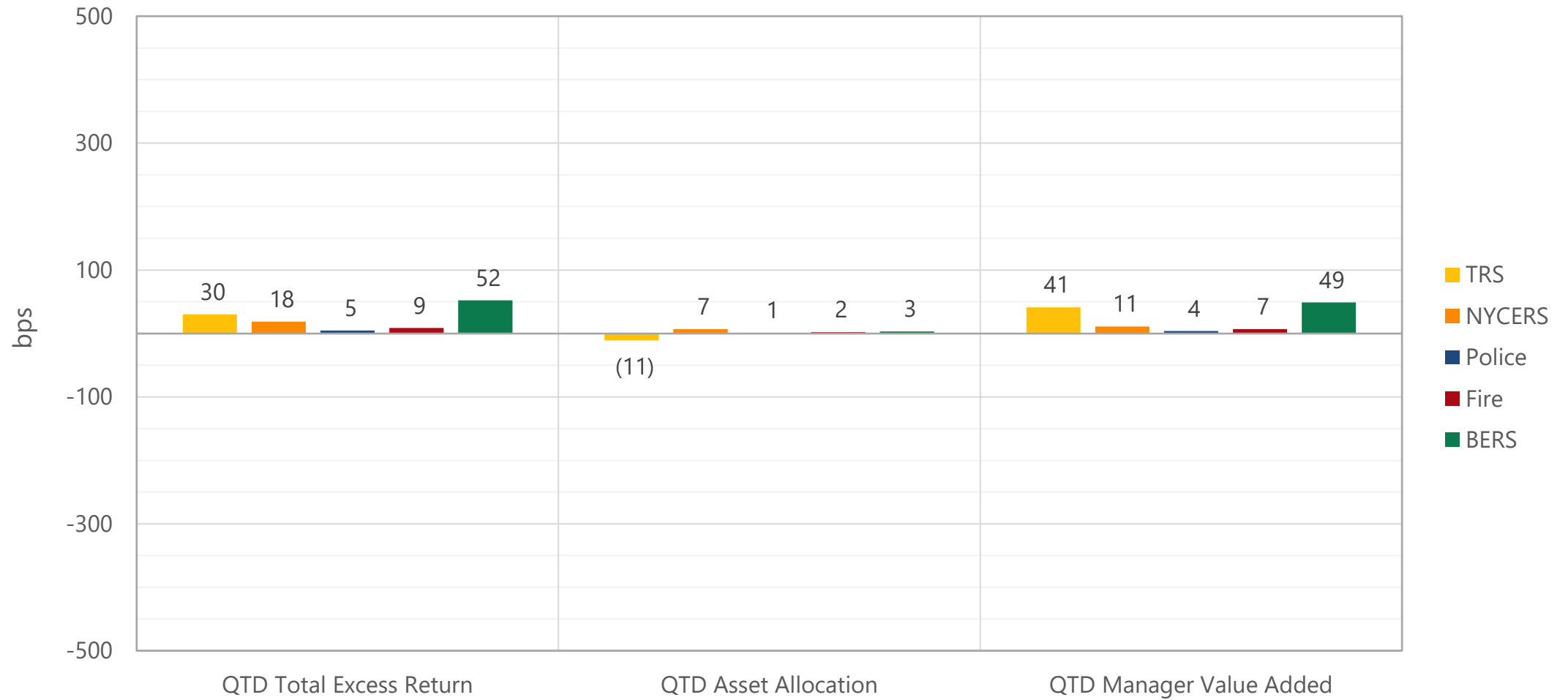


Source: State Street



Quarter to Date as of 6/30/21 Excess Return – Total Portfolio

Basis Points of Excess Return (SSB **F** p.13; **T, N** p.14 ; **P** p.16; **B** p.18)

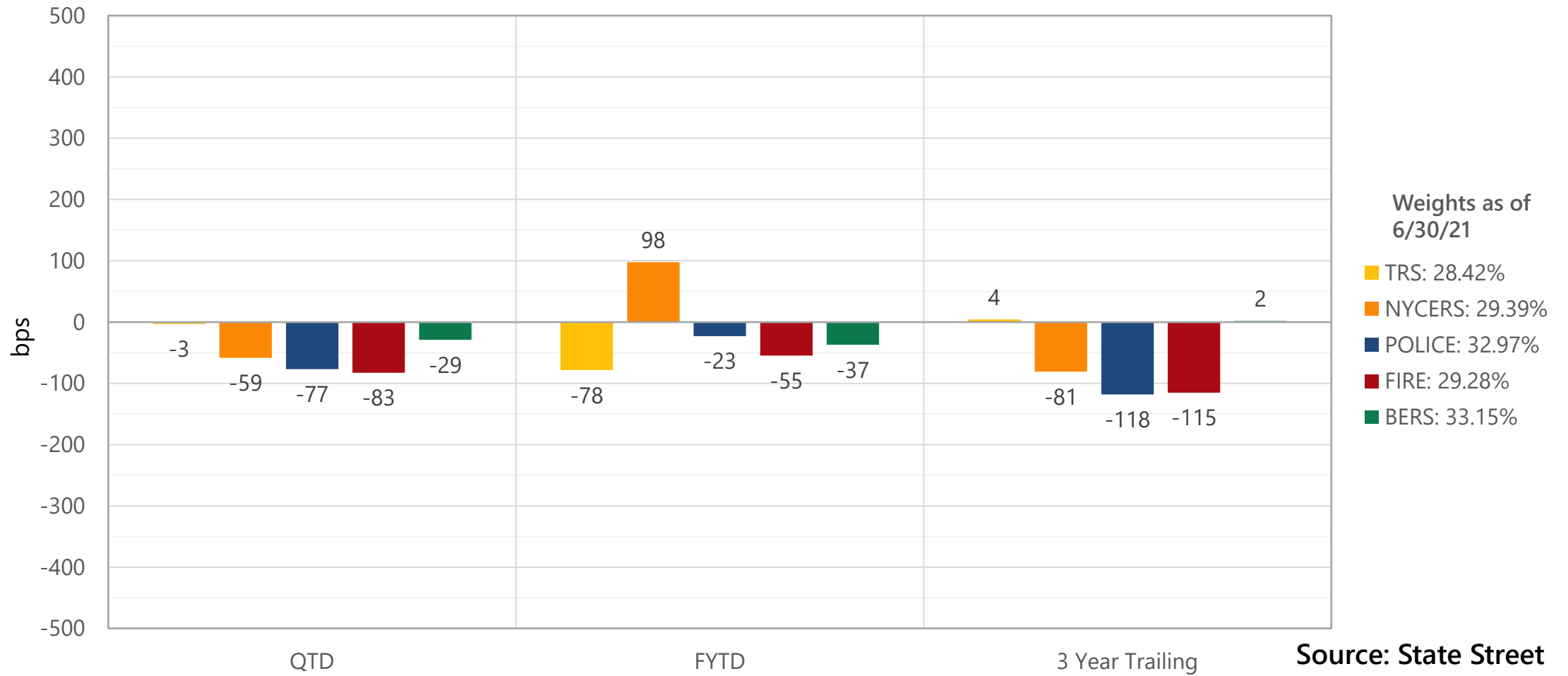


Source: State Street



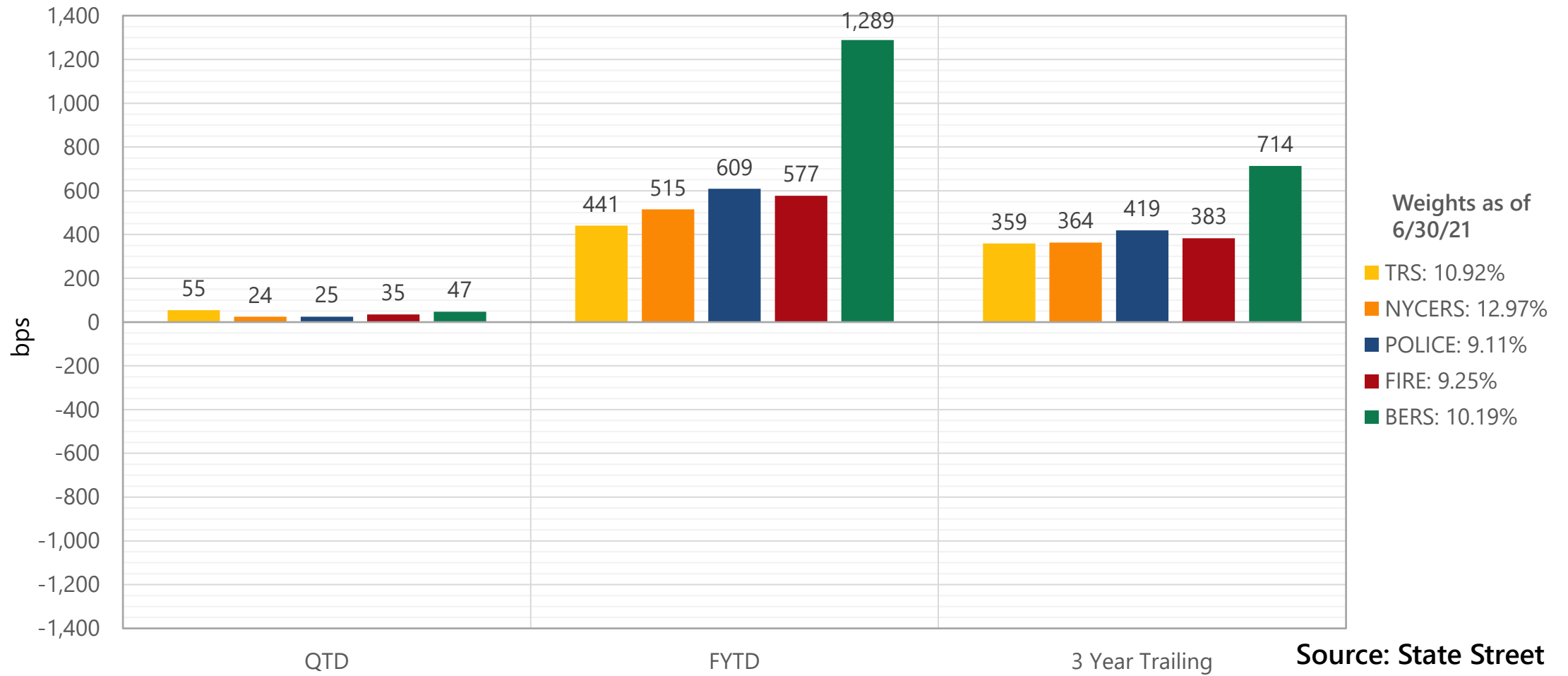
Value Added – Total Domestic Equity

Basis Points of Excess Return (SSB **F** p.29; **T, N** p.30; **P** p.32; **B** p.34)



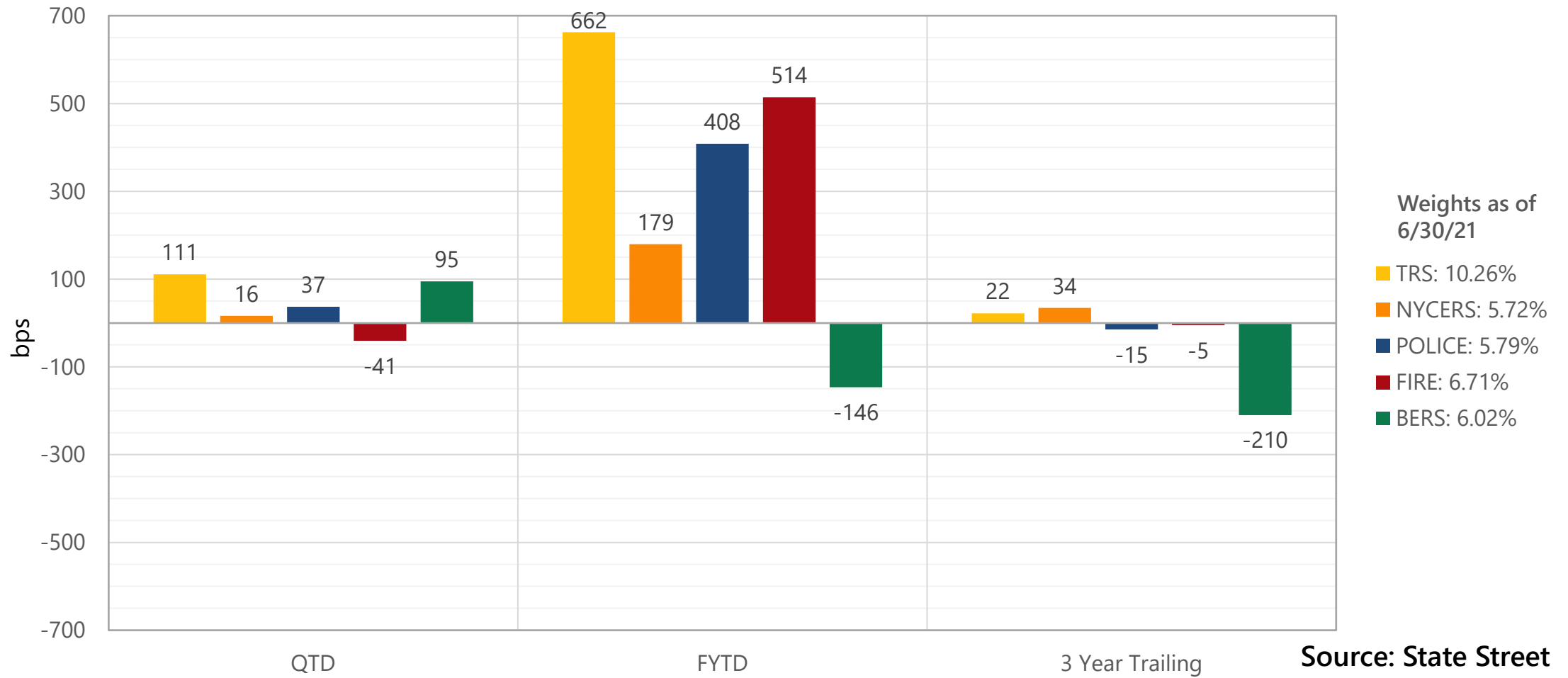
Value Added – Total World Ex-USA

Basis Points of Excess Return (SSB **T**, **N**, **F** p.31 ; **P** p.34; **B** p.35)



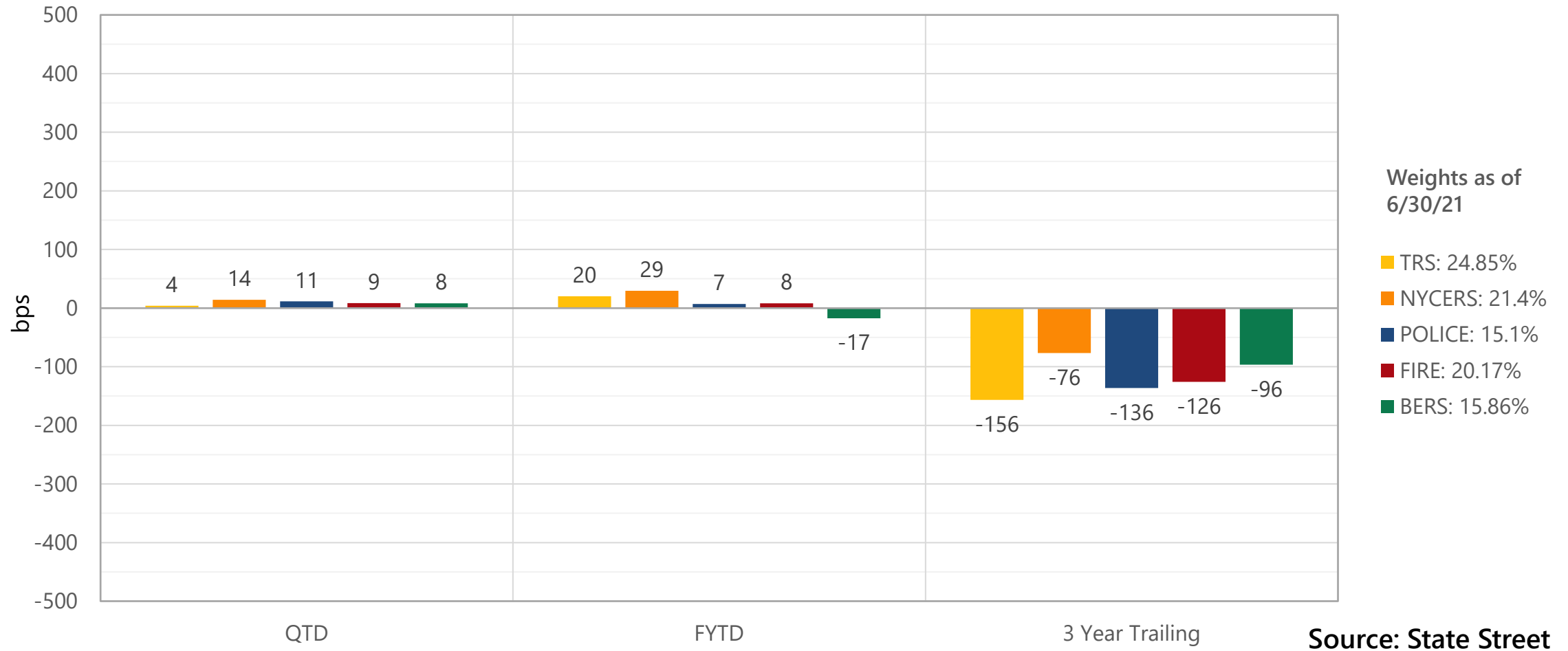
Value Added – Total Emerging Markets

Basis Points of Excess Return (SSB T, N, F p.32 ; P, B p.35)



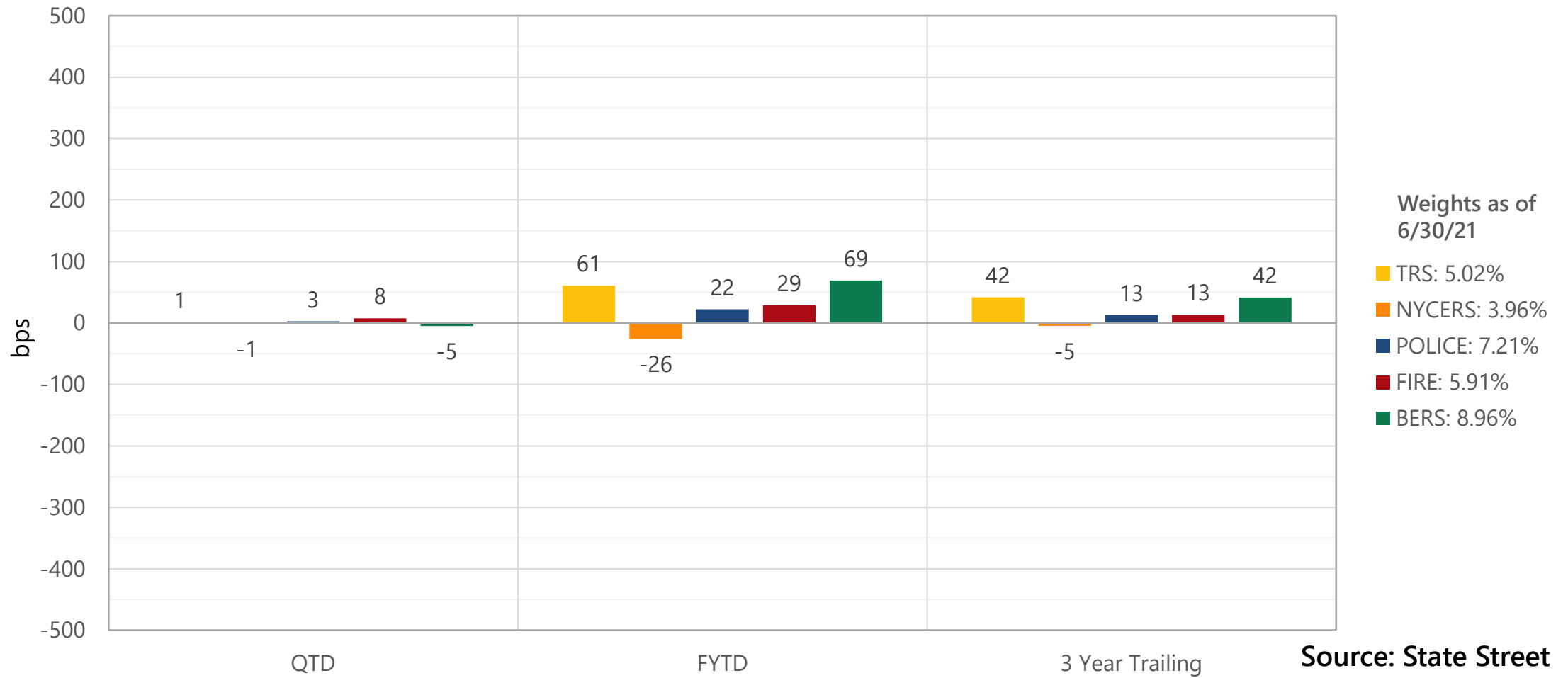
Value Added – Total Structured Fixed Income

Basis Points of Excess Return (SSB **T** p.34; **N, F** p.35; **B** p.37; **P** p.38)



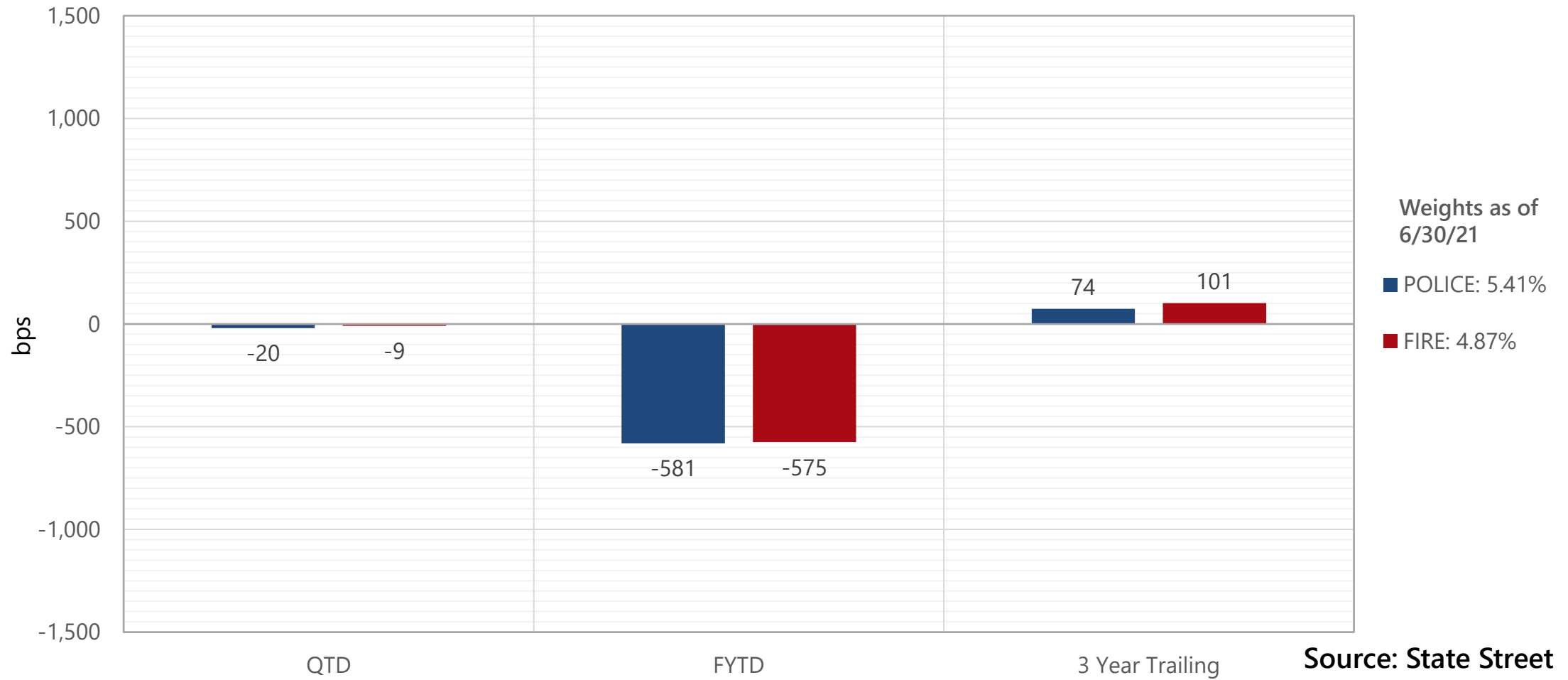
Value Added – High Yield

Basis Points of Excess Return (SSB **T** p.36; **N**, **F** p37.; **B**, p.39; **P** p.40)



Value Added - Hedge Funds

Basis Points of Excess Return (SSB F p.33; P p.36)

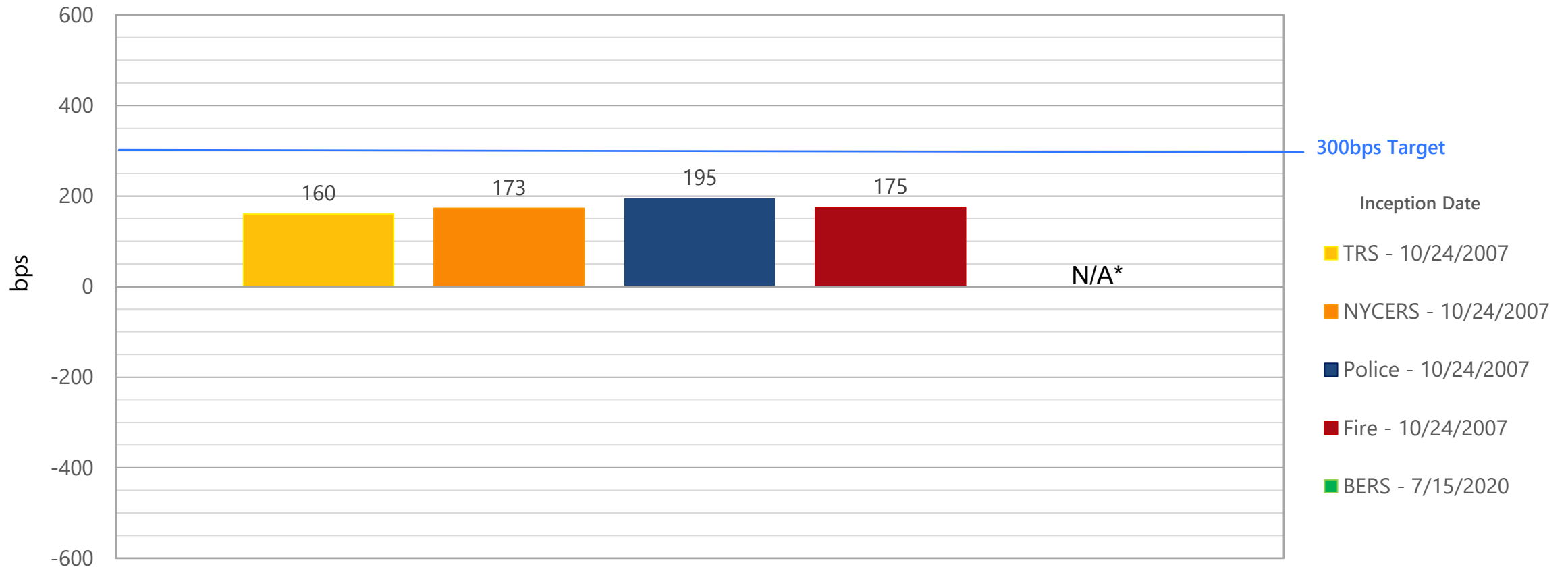


PRIVATE MARKET DATA



Value Added - Opportunistic Fixed Income (OFI)

Basis Points of Cumulative IRR above Public Market Equivalent



Excess Return Since Inception; PME Benchmark: 50% JP Morgan Global High Yield 50% CS Leveraged Loans as of 6/30/21

The PME Spread is the difference between the IRR and the PME.

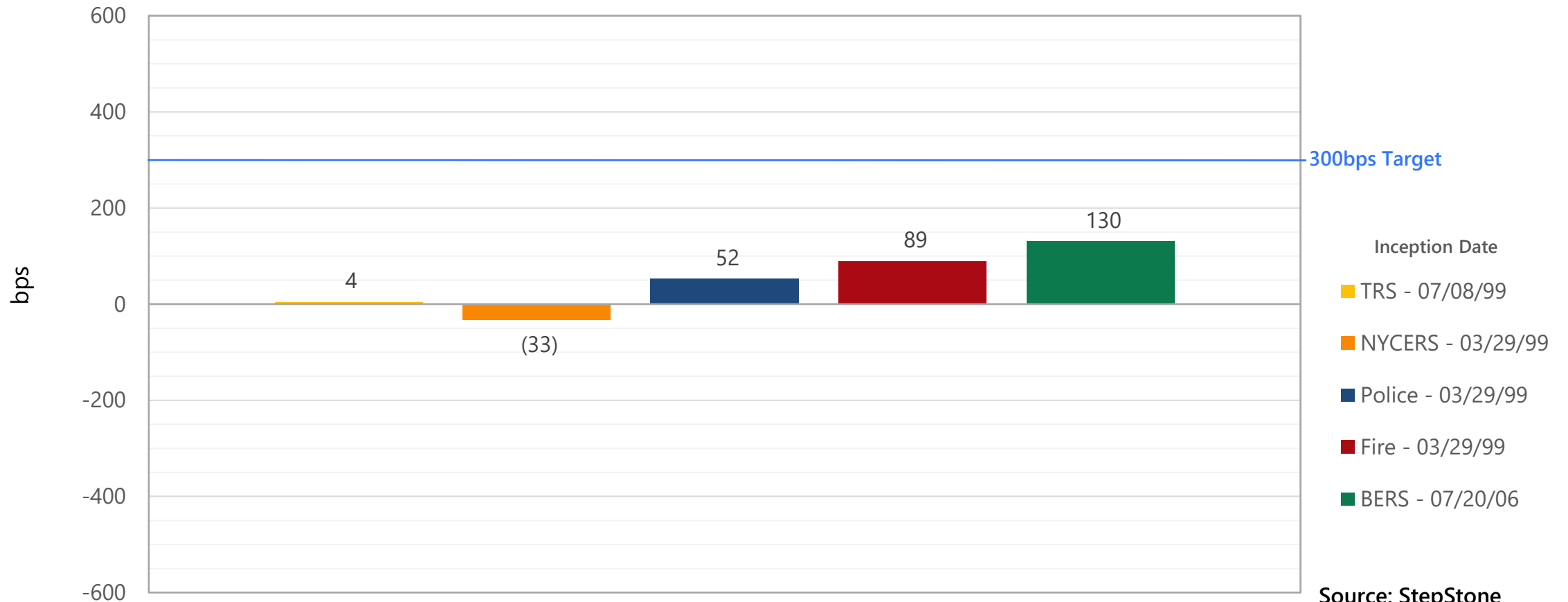
*BERS PME spread is not meaningful given investment start date of July 2020.

Source: State Street



Value Added - Private Equity

Basis Points of Cumulative IRR above Public Market Equivalent



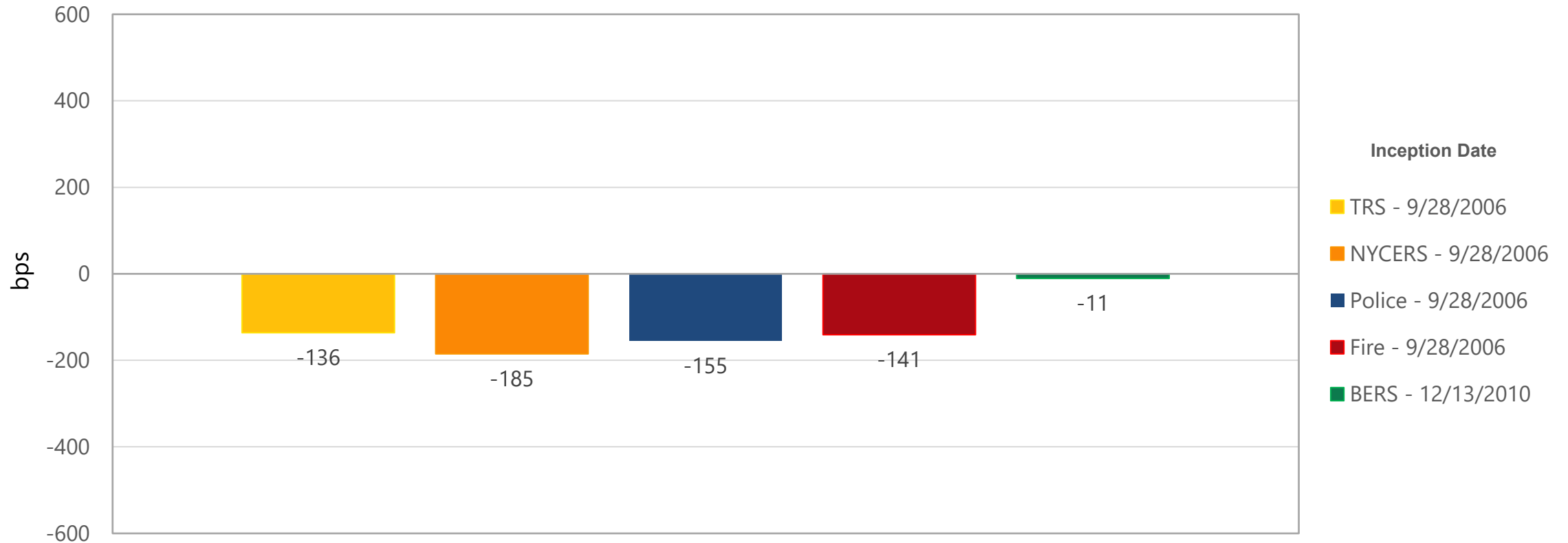
Excess Return Since Inception; The PE Benchmark is the Russell 3000 + 300 bps as of 3/31/21

The PME Spread is the difference between the IRR and the PME.



Value Added - Private Real Estate - Core

Basis Points of Cumulative IRR above Public Market Equivalent



Excess Return Since Inception; Core PME = 40% Russell 3000 & 60% Barclay Agg. as of 3/31/21

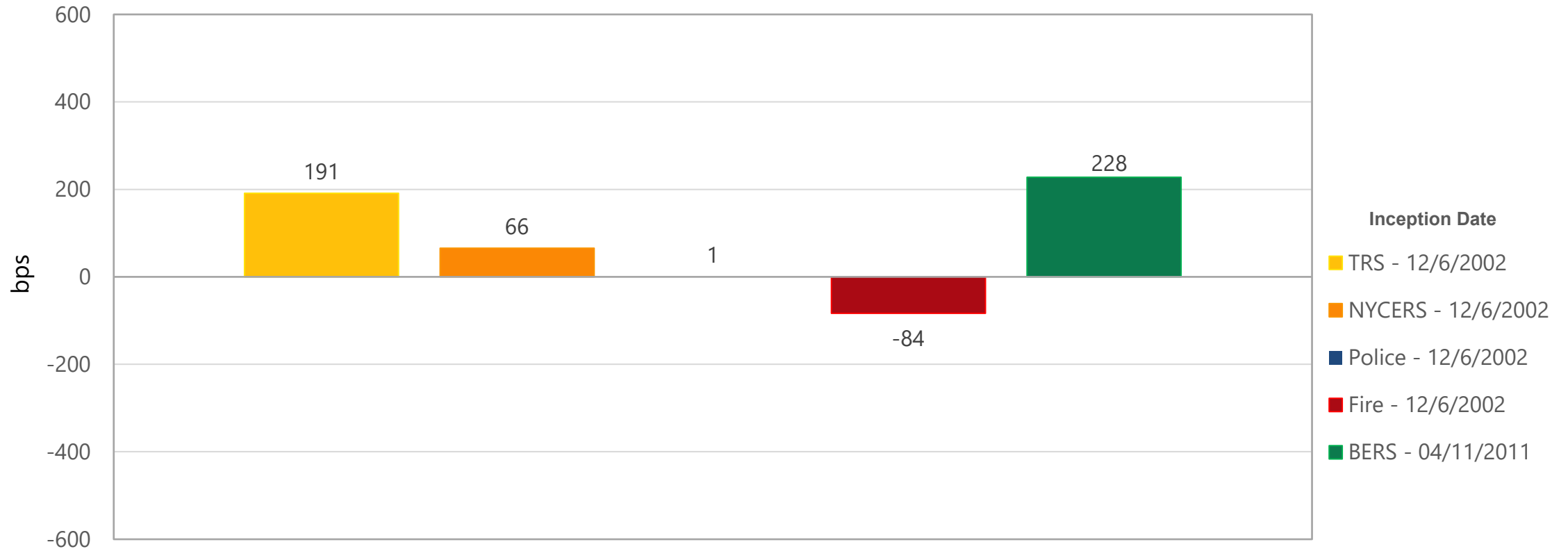
Source: State Street

The PME Spread is the difference between the IRR and the Core PME Return.



Value Added - Private Real Estate – Non-Core

Basis Points of Cumulative IRR above Public Market Equivalent



Excess Return Since Inception; Non-core PME = 60% Russell 3000 & 40% Barclay Agg. as of 3/31/21

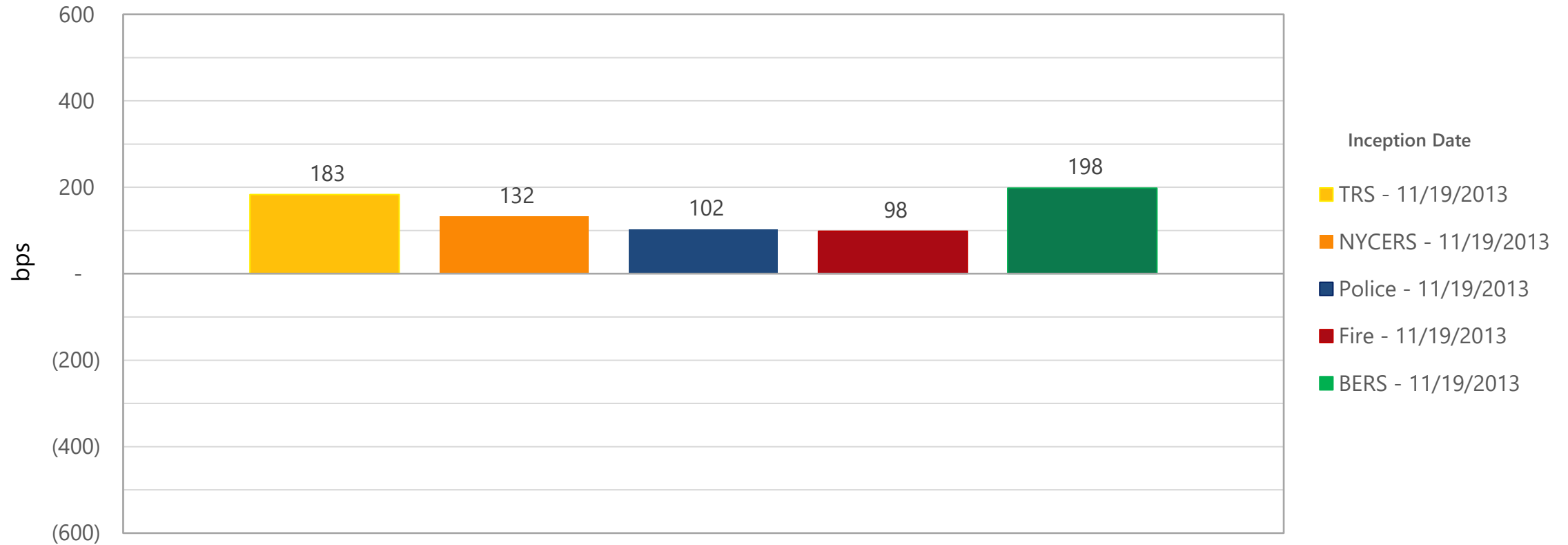
Source: State Street

The PME Spread is the difference between the IRR and the Non-core PME Return.



Value Added - Infrastructure

Basis Points of Cumulative IRR above Public Market Equivalent



Source: StepStone Group

The PME Spread is the difference between the IRR and the PME.

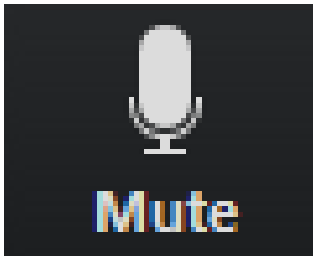


QUESTIONS?

If you would like to ask a question



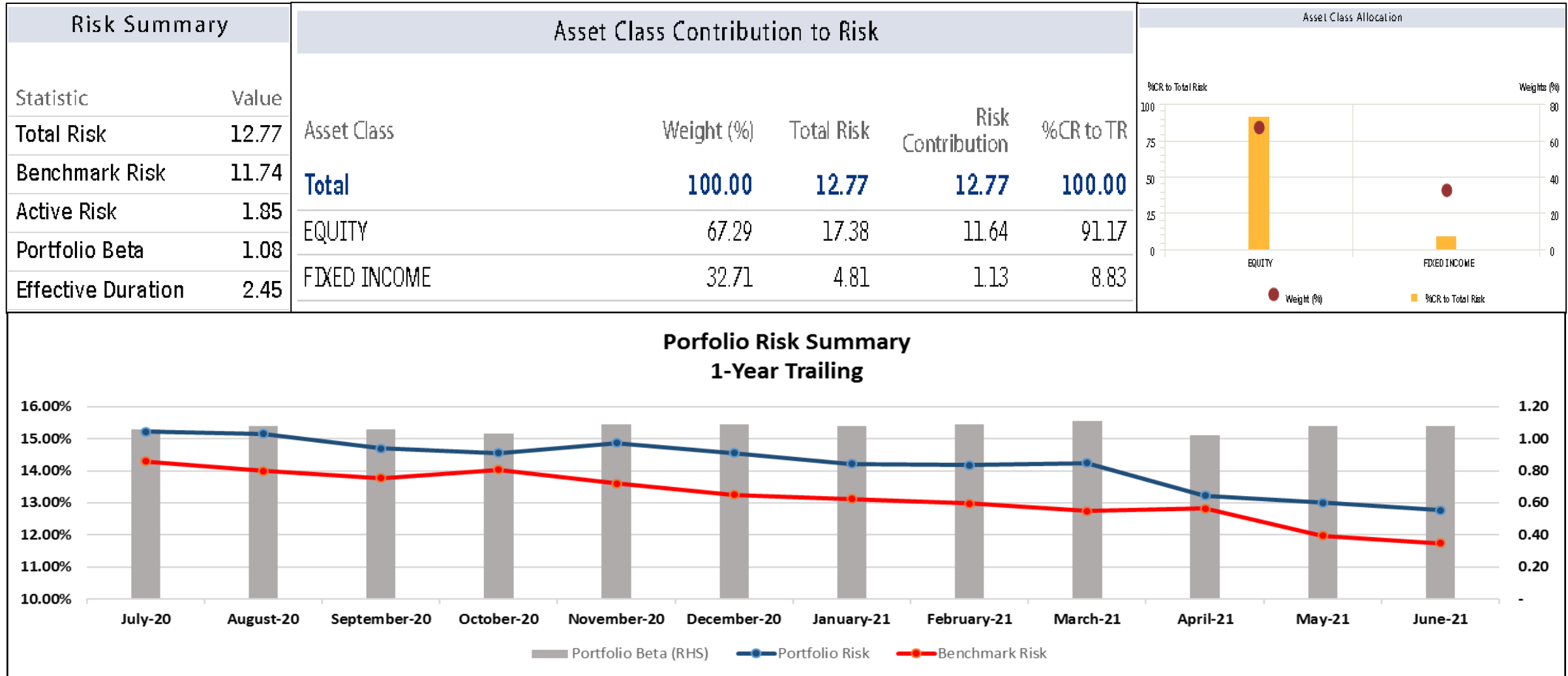
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RISK UPDATE

2nd Quarter 2021




TOTAL PLAN SUMMARY



Source: MSCI



QUARTERLY CHANGES IN RISK

Portfolio Risk March 31, 2021*	13.62	Beginning value
Change in Volatility	(0.91)	 Reduction in risk as a result of lower market volatility
Change in Correlation	-	 No significant change in risk as a result of changing correlations
Change in Portfolio Exposures	0.06	 Increase in risk as a result of active investments in the portfolio
Portfolio Risk June 30, 2021	12.77	Ending value

* March 2021 value based on updated MSCI MAC Model Results.

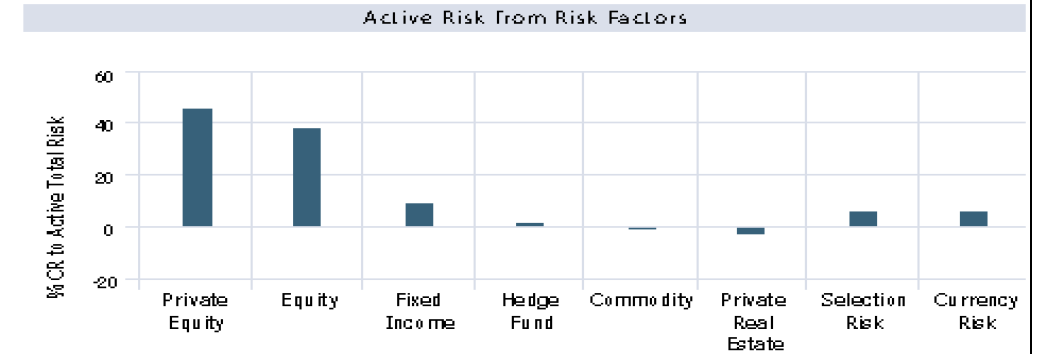
- Overall portfolio risk declined by 85bp since March
- Change in risk was decomposed into three categories
 - Changes in Volatility and Correlation (blue arrows) are market-driven
 - Change in Portfolio Exposures (red arrow) are unique to our investment mix
- Changes were driven by Industry factors and, to a lesser degree, Spread factors



FACTOR SUMMARY

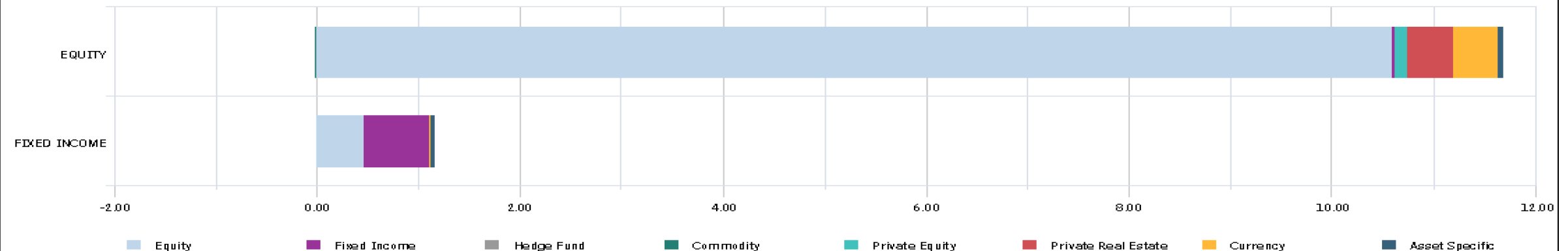
Risk Factor Breakdown

Risk Decomposition						
Risk Source	Portfolio			Active		
	Risk Contribution	% Risk	Correlation	Risk Contribution	% Risk	Correlation
Total Risk	12.77	100.00	1.00	1.85	100.00	1.00
Local Market Risk	12.31	96.42	1.00	1.75	94.40	0.99
Common Factor Risk	12.28	96.14	1.00	1.64	88.86	0.96
Equity	11.06	86.59	0.98	0.70	37.69	0.64
Fixed Income	0.65	5.12	0.48	0.17	9.04	0.51
Hedge Fund	0.00	0.01	0.01	0.01	0.49	0.07
Private Real Estate	0.47	3.67	0.71	-0.05	-2.44	-0.13
Commodity	-0.02	-0.19	-0.41	-0.02	-0.85	-0.27
Private Equity	0.12	0.94	0.10	0.83	44.92	0.67
Selection Risk	0.04	0.28	0.05	0.10	5.54	0.24
Currency Risk	0.46	3.58	0.45	0.10	5.60	0.34



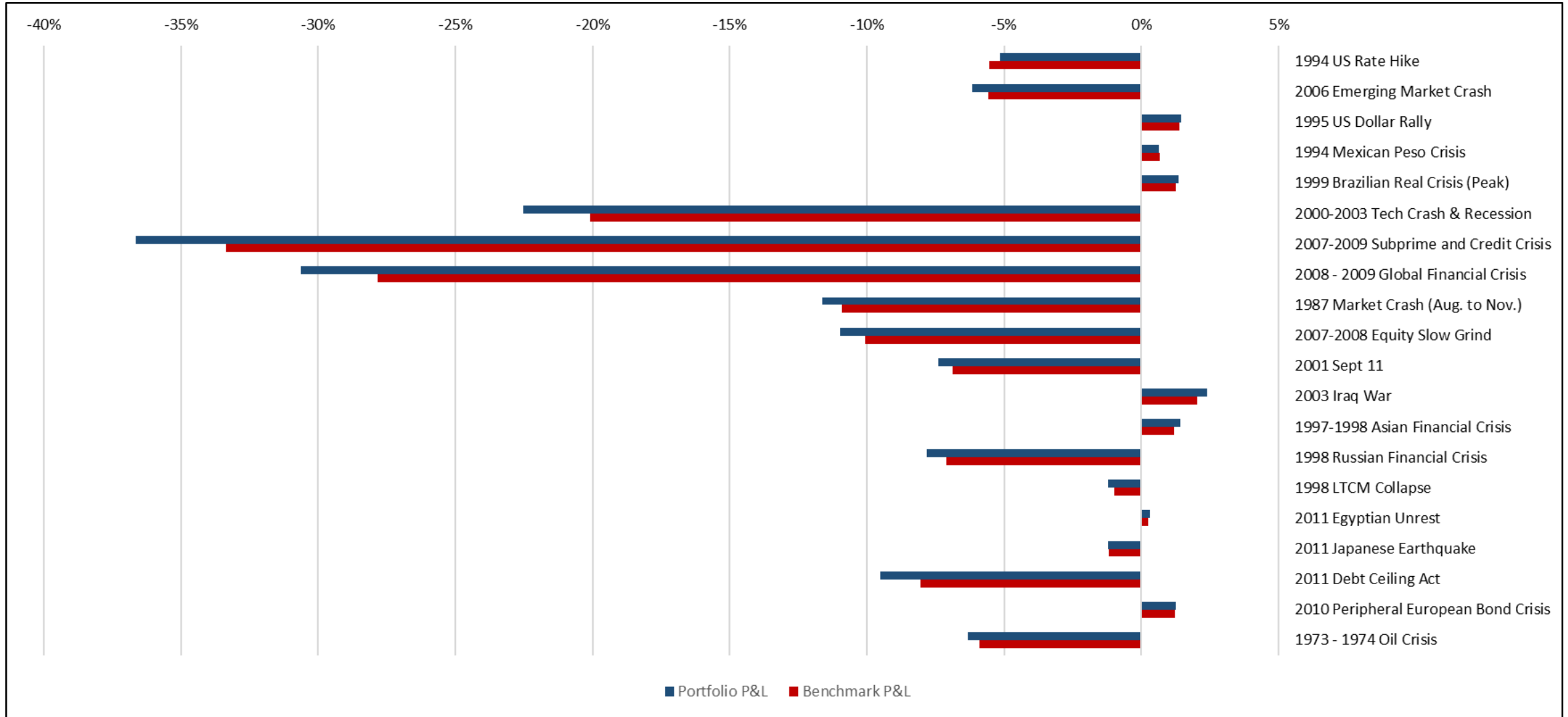
Risk Contribution Breakdown by Risk Type

Asset Name	Mkt Value	Weight (%)	Eff Weight (%)	Total Risk	%CR to Total Risk	Port Risk Contribution	Risk Contribution							
							Equity	Fixed Income	Hedge Fund	Commodity	Private Real Estate	Private Equity	Currency	Asset Specific
Total		100.00	-	12.77	100.00	12.77	11.06	0.65	0.00	-0.02	0.47	0.12	0.46	0.04
EQUITY	67.29	-	-	17.38	91.17	11.64	10.59	0.02	0.00	-0.02	0.47	0.11	0.44	0.03
FIXED INCOME		32.71	-	4.81	8.83	1.13	0.46	0.63	0.00	0.00	0.00	0.01	0.02	0.00



Source: MSCI

STRESS SCENARIOS



Source: MSCI

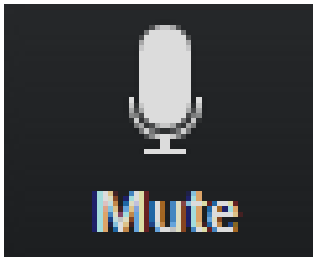


QUESTIONS?

If you would like to ask a question



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SUPPLEMENTAL MATERIAL - Performance Reporting (Public):

Quarterly Fund Performance Overview (Public):



New York City
Fire Department Pension Fund, Subchapter Two
Performance Overview as of June 30, 2021

Total Fund Overview

New York City Fire Department Pension Fund, Subchapter Two

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Through June 30, 2021

Broad Market Commentary

The more robust macroeconomic backdrop has generally resulted in higher growth and inflation expectations in the near term. While the increase in interest rates during 2021 has been notable, we still suggest investors maintain a dedicated allocation to Treasuries to support liquidity levels and cash flow needs in the event of a market dislocation. Further, the ongoing support from monetary and fiscal interventions provides a supportive environment for equities. To that end, we encourage investors to favor equities even in the face of modestly higher interest rates.

Equity Markets

Global equities posted strong returns in the second quarter, propelled by continuing vaccine adoption, ongoing monetary and fiscal support, and a robust economic outlook. U.S. stocks led the way for a second straight quarter, with the S&P 500 up 8.5%; meanwhile, international developed-market equities gained 5.2% and emerging markets returned 5%. In the U.S. and international developed markets, small caps underperformed, while emerging market small caps bested emerging large caps. In a reversal from the first quarter, growth indexes outperformed value measures, with the Russell 1000 Growth returning 11.9% compared to gains of 5.2% for the Russell 1000 Value Index. Within sectors, real estate, information technology, energy and communication services led performance, while utilities, consumer staples, industrials and materials lagged the market.

In hedge funds, the HFRI Equity Hedge (Total) Index gained 5.5% for the three months ended June 30. During this period, technology- and healthcare-focused hedge funds underperformed, returning 3.7% and 1.1% respectively. After gross and net leverage hit their highest levels since 2010 in January, leverage modestly decreased in the second quarter.

Meanwhile, global private equity fundraising hit a quarterly high of \$295.4 billion for the three months ended June 30, according to Preqin. U.S. buyout deal activity—confirmed and estimated—came in at a robust \$255.1 billion, according to PitchBook data. In another quarterly high, U.S. buyout exit activity totaled \$186.7 billion, according to PitchBook. In venture capital, deal activity totaled \$75 billion—tying with the record set in the prior quarter—fueled mostly by large late-stage deals of \$50 million or more; during the same period, exit activity was strong, totaling a record \$241.3 billion, according to PitchBook.

Fixed Income

U.S. Treasury yields reversed course in the second quarter, with yields falling on the 10-year Treasury note. The Federal Open Market Committee announced on the heels of its meeting in June that it would keep rates unchanged at 0.00%-0.25%. Credit spreads tightened in the three months ended June 30, reflecting a broader appetite for risk-taking; the spread tightening was more pronounced in lower-quality credit with the Bloomberg Barclays U.S. High Yield Index Option-Adjusted Spread decreasing nearly 40 basis points since March. Corporate credit gained

Through June 30, 2021

in the second quarter with the Bloomberg Barclays U.S. Aggregate Index up 1.8%, while the Bloomberg Barclays U.S. Corporate High Yield Index returned 2.7% in the second quarter.

Meanwhile, hedge fund indexes focused on structured credit and distressed debt were in the black in the second quarter and up for the year; the HFRI Relative Value: Fixed Income-Asset Backed Index returned 2.7% and the HFRI Event Driven: Distressed/Restructuring Index increased 5.5% in the second quarter. During this period, emerging market debt posted robust gains with the JPM EMBI Global Diversified Index returning 4.1% and the JPM GBI-EM Global Diversified Index increasing 3.5%.

Performance (net of fees)

For the quarter, the Fund returned 5.35%, outperforming the policy index return by 9 basis points. Over the trailing 3-year period, the Fund returned 11.92% versus the index return of 12.08%, underperforming the policy index by 16 basis points.

Equity Composite (net of fees)

For the end of the quarter, the total equity composite (including alternatives and REITS) returned 6.58% for the quarter. For the 3-year period the portfolio returned 14.73%. For the quarter, total equity assets represented 64.75% of the total Fund assets.

For the quarter, domestic equity assets represented 29.28% of the total Fund assets. The Total Domestic Equity Portfolio returned 7.41%, underperforming the Russell 3000 Index return of 8.24% by 83 basis points. The domestic equity portfolio is lagging its index by 115 basis points for the 3-year period.

For the quarter, World ex-US equity assets represented 9.25% of the total Fund assets. The Total World ex-US Portfolio returned 5.87%, outperforming its index, which returned of 5.52%, by 35 basis points. World ex-US portfolio is outperforming its index by 383 basis points for the 3-year period.

Credit/Fixed Income Composites (net of fees)

For the quarter, total fixed income assets (including cash and alternative credit assets) represented 35.25% of the total Fund assets. The portfolio returned 3.01% for the quarter. The portfolio returned 6.54% for the 3-year period.

For the quarter, the structured fixed income portfolio represented 20.17% of the total Fund assets. The portfolio returned 2.97% for the quarter, outperforming its index for the quarter by 9 basis points. The portfolio returned 7.28% for the 3-year period.

Through June 30, 2021

For the quarter, high yield portfolio assets represented 5.91% of the total Fund assets. The portfolio returned 2.81% for the quarter, outperforming its index for the quarter by 7 basis points. The portfolio returned 7.55% for the 3-year period.

For the quarter, the opportunistic fixed income assets represented 3.13% of the total Fund assets. The portfolio returned 4.87% for the quarter, outperforming its index for the quarter by 204 basis points. The portfolio returned 8.07% for the 3-year period.

Real Estate and Infrastructure Composites

For the quarter, private real estate assets represented 4.22% of the total Fund assets. The portfolio returned (time-weighted, net of fees) 3.78% for the quarter, underperforming its index for the quarter by 15 basis points. The portfolio returned 6.49% for the 3-year period.

For the quarter, infrastructure assets represented 1.02% of the total Fund assets. The portfolio returned (time-weighted, net of fees) 3.38% for the quarter, outperforming its index for the quarter by 3 basis points. The portfolio returned 11.93% for the 3-year period.

Private Equity Composites (time weighted)

For the quarter, private equity assets represented 6.91% of the total Fund assets. The portfolio returned (time-weighted, net of fees) 10.34% for the quarter, outperforming its index for the quarter by 322 basis points. The portfolio returned 19.66% for the 3-year period.

NYC's Direct HF allocations only:

The allocation to hedge funds as of June 30, 2021 was \$861.4 million, 4.5% of the total fund. The second quarter return for the hedge fund portfolio was +3.2%, outperforming the HFRI FOF Composite Index + 1% p.a. return of +3.1%, and outperforming the 1 Yr. T-bill yield + 4% p.a. return of +0.9%.

Fire still has a single digit basis point exposure to a fund of hedge funds investment, which will be received in the future in the form of a redemption.

Note: 1Yr. T-bill + 4% p.a. calculated using Barclays U.S. Treasury: 1-3 Year + 4% p.a.

NYC's Tactical Portfolio:

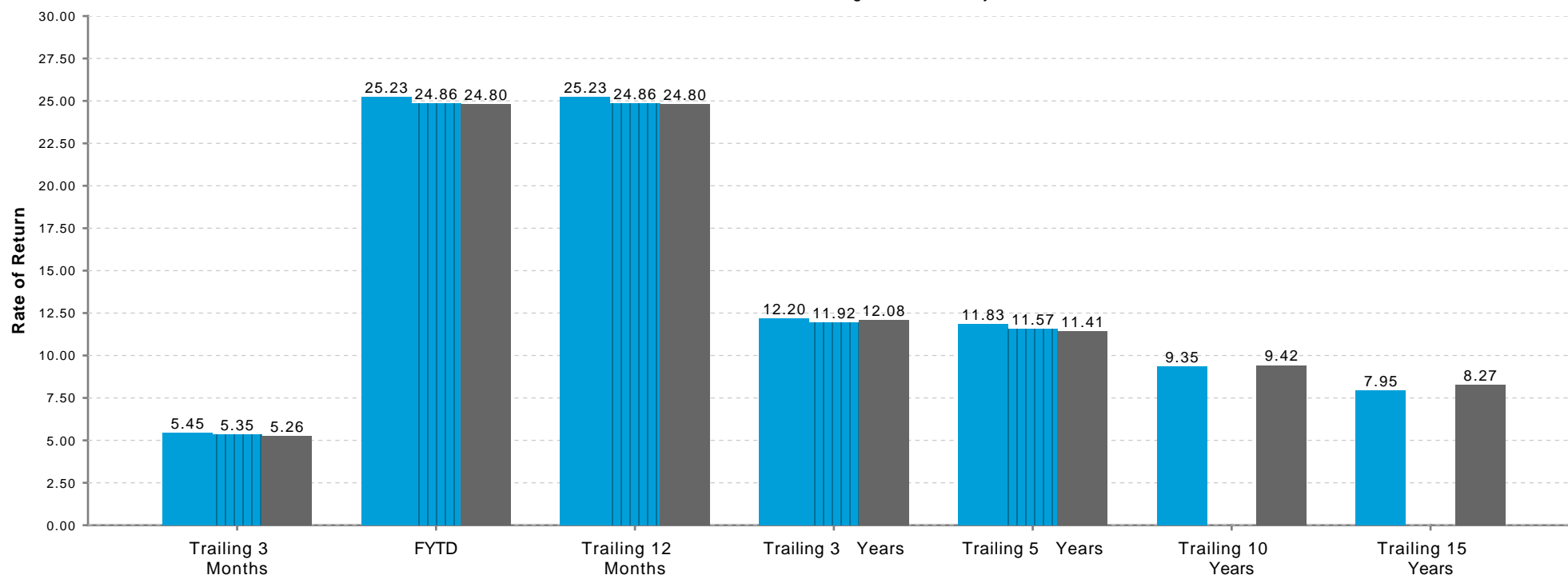
The allocation to the tactical trade as of June 30, 2021 was \$67.1 million, 0.4% of the total fund. The second quarter return for the tactical trade was -0.5%, underperforming the Russell 3000 return of +8.2%.

Market Value (Billions)

\$19.0

TOTAL FIRE

■ Total Fire - Gross ■ Total Fire - Net Mgr ■ Fire Policy Benchmark

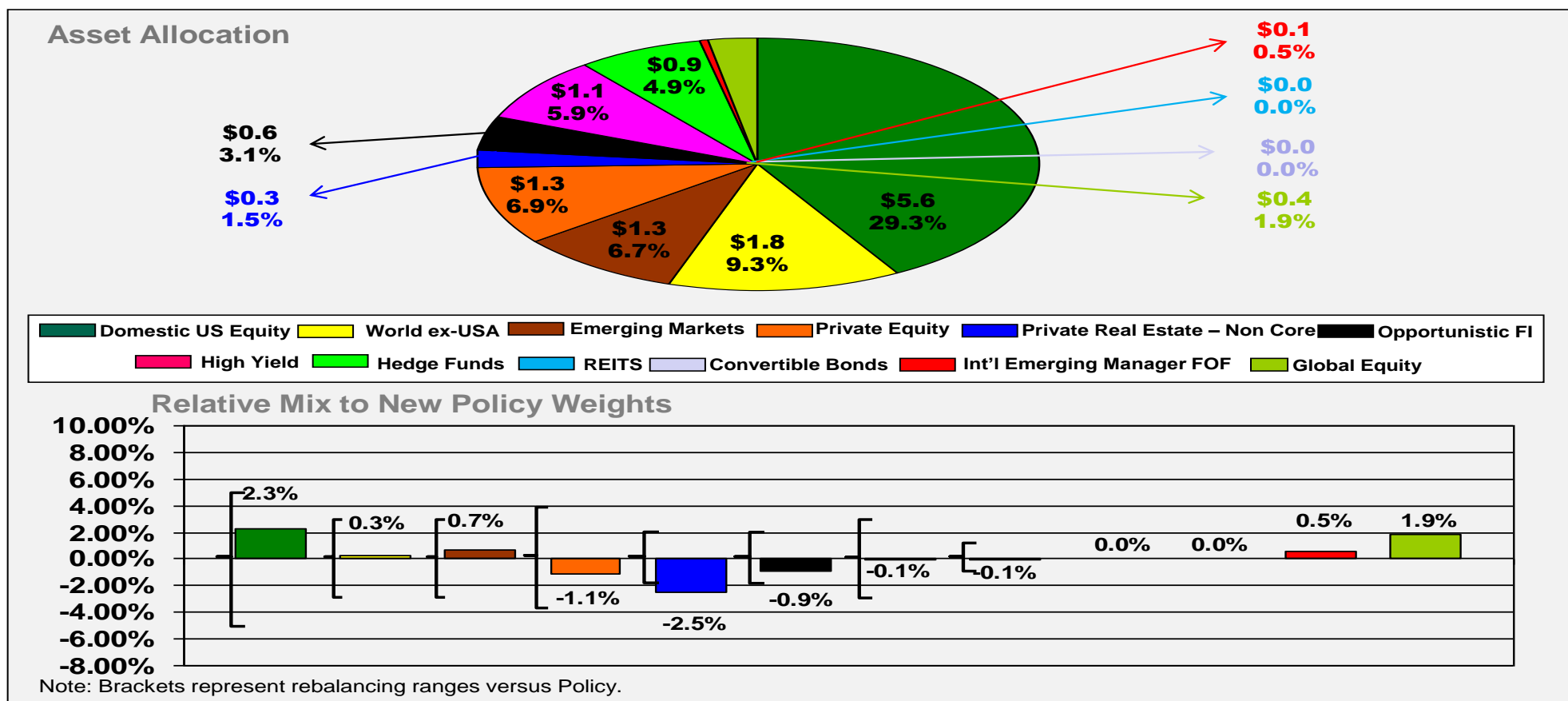


	Plan 3 Years	Benchmark 3 Years	Plan 5 Years	Benchmark 5 Years	Plan 10 Years	Benchmark 10 Years
Standard Deviation						
TOTAL FIRE	9.3	10.0	11.8	8.1	7.6	7.8



Portfolio Asset Allocation: June 30, 2021

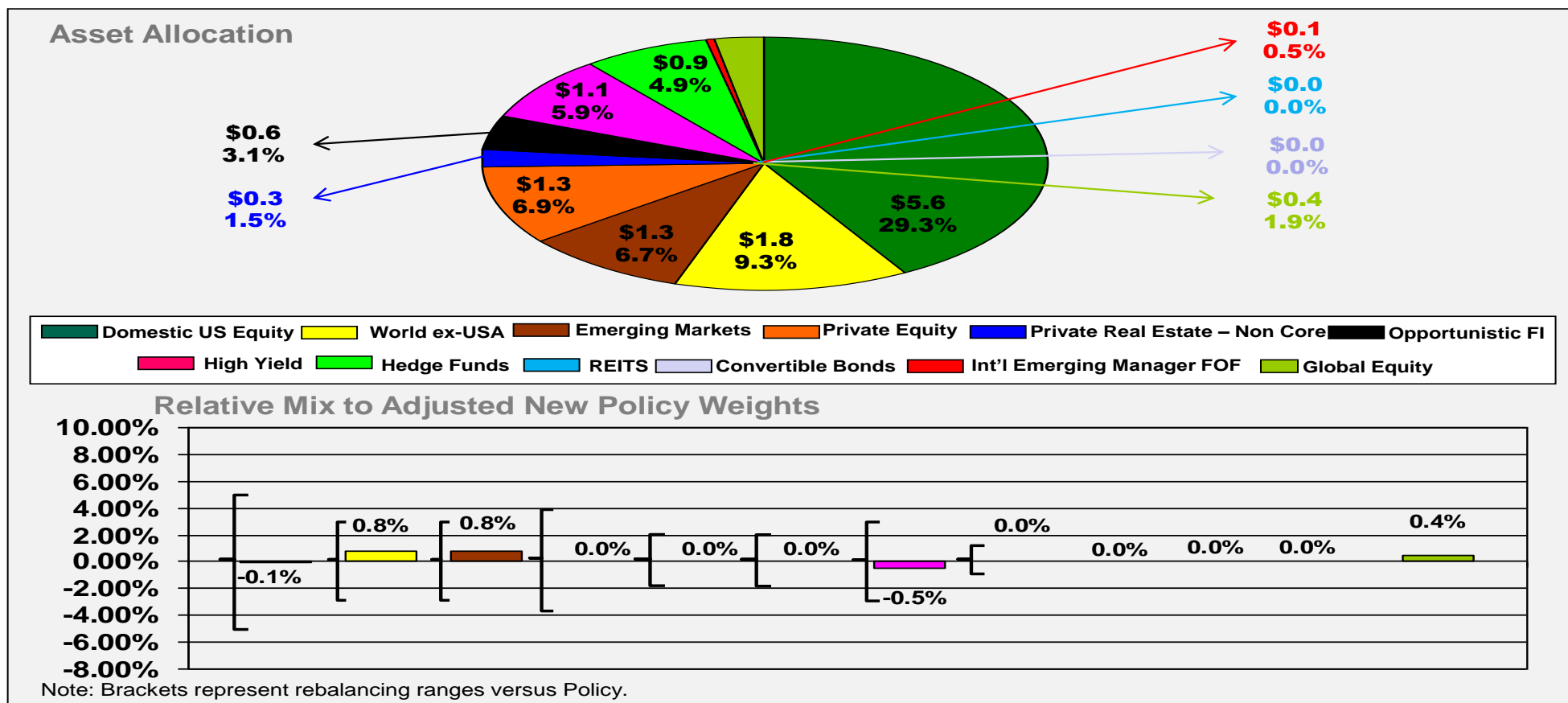
Portfolio Asset Allocation – Growth





Portfolio Asset Allocation: June 30, 2021

Portfolio Asset Allocation – Growth

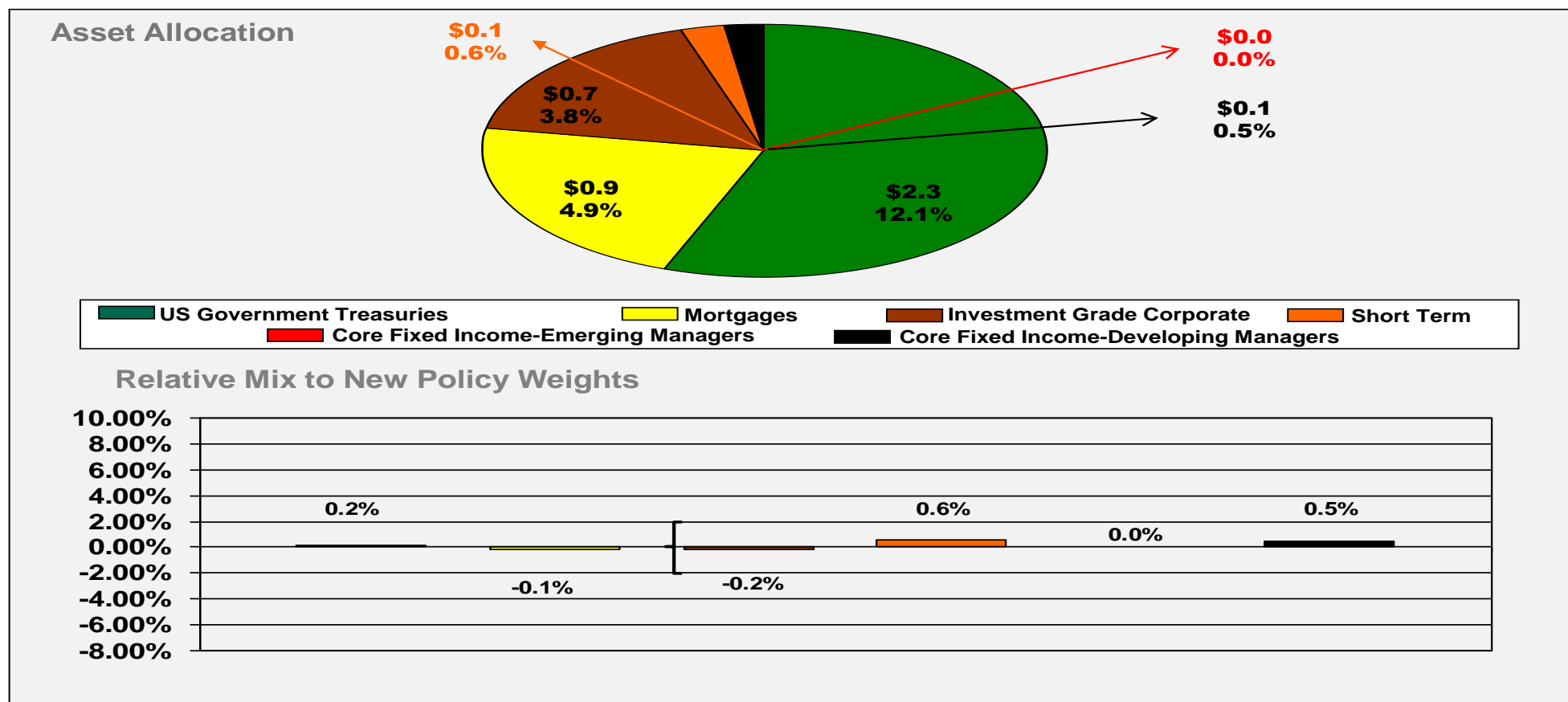


Note: On June 30, 2021 Fire's combined Fixed Income and Cash portfolios have a duration of 7.2 years. The duration of the Bloomberg US Aggregate Index was 6.6 years on that date.



Portfolio Asset Allocation: June 30, 2021

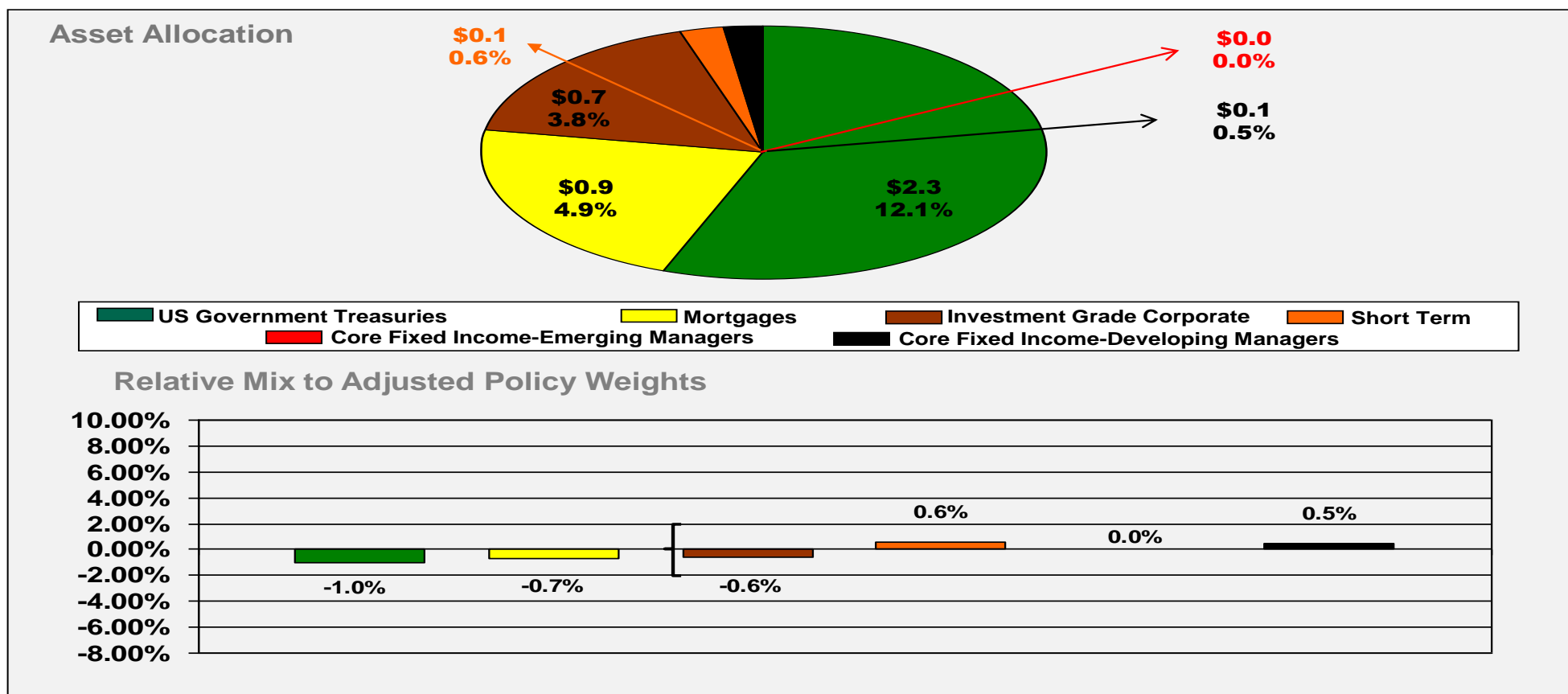
Portfolio Asset Allocation – Deflation Protection





Portfolio Asset Allocation: June 30, 2021

Portfolio Asset Allocation – Deflation Protection

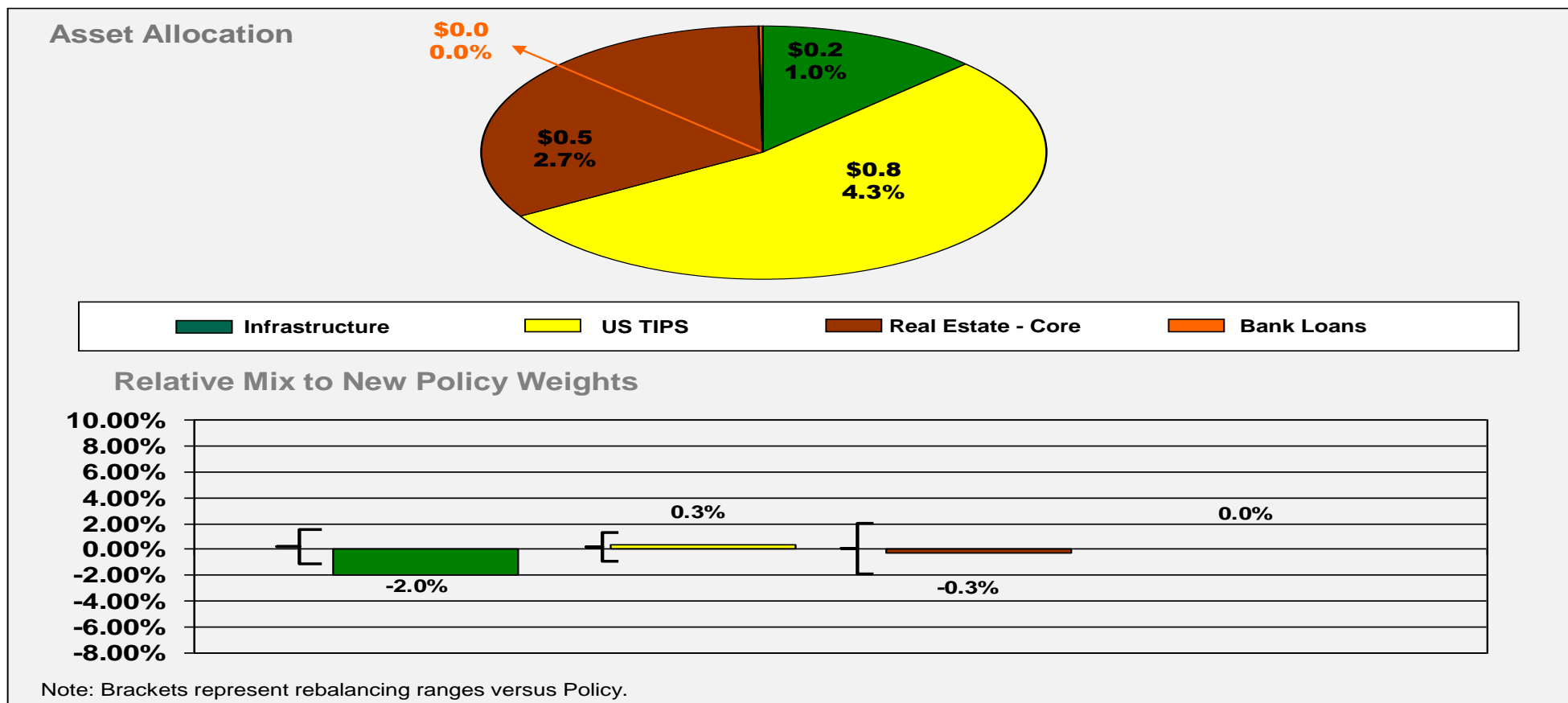


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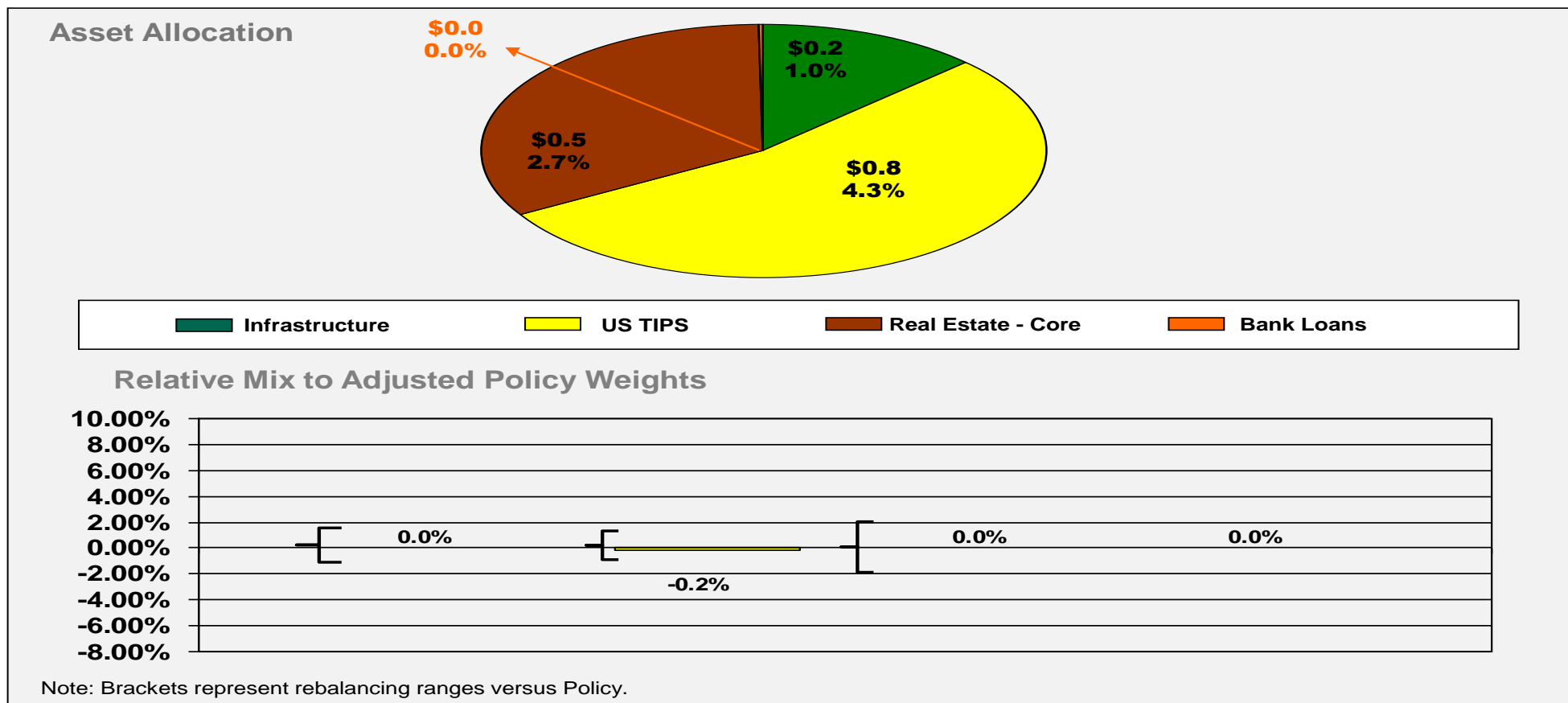
Portfolio Asset Allocation – Inflation Protection



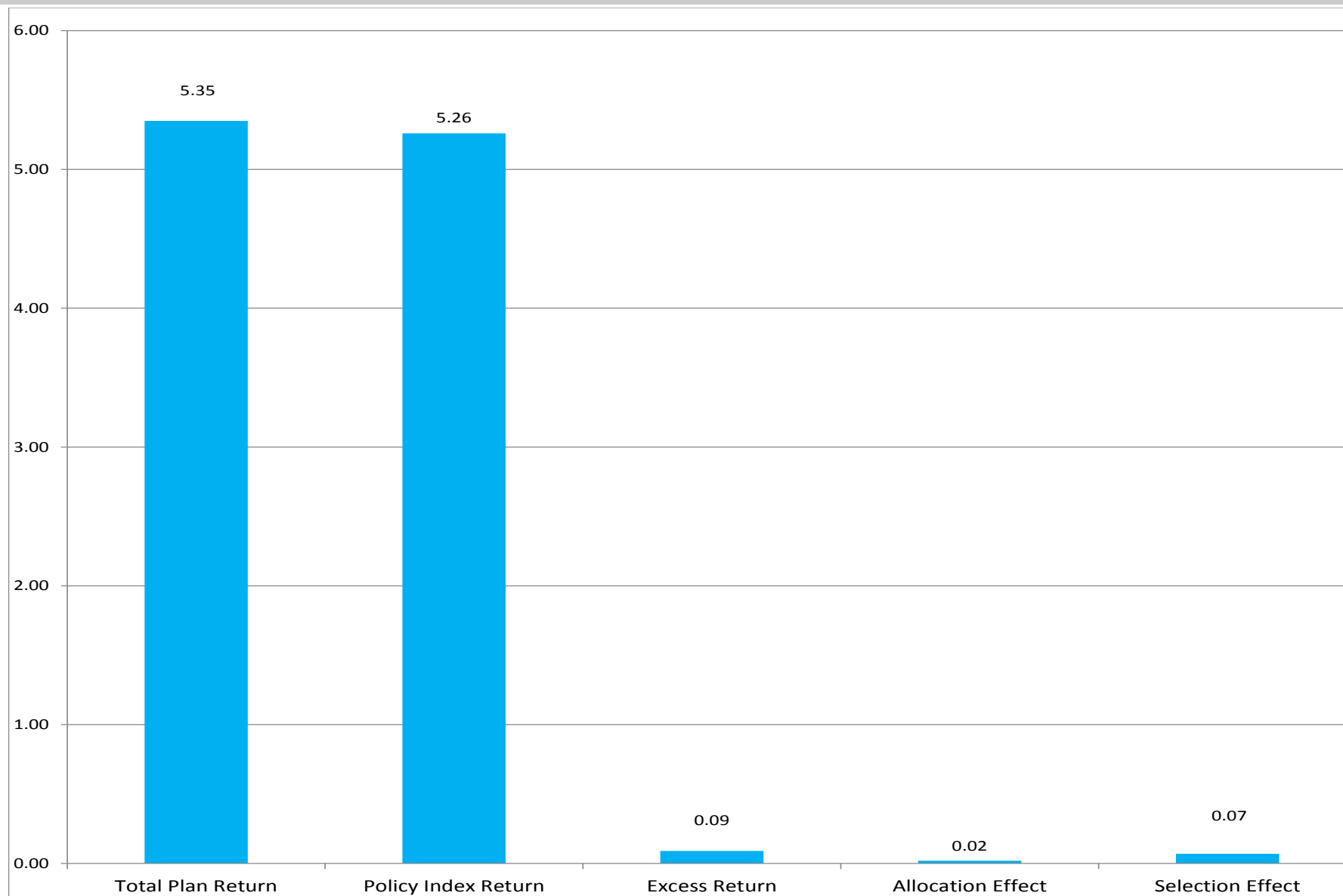


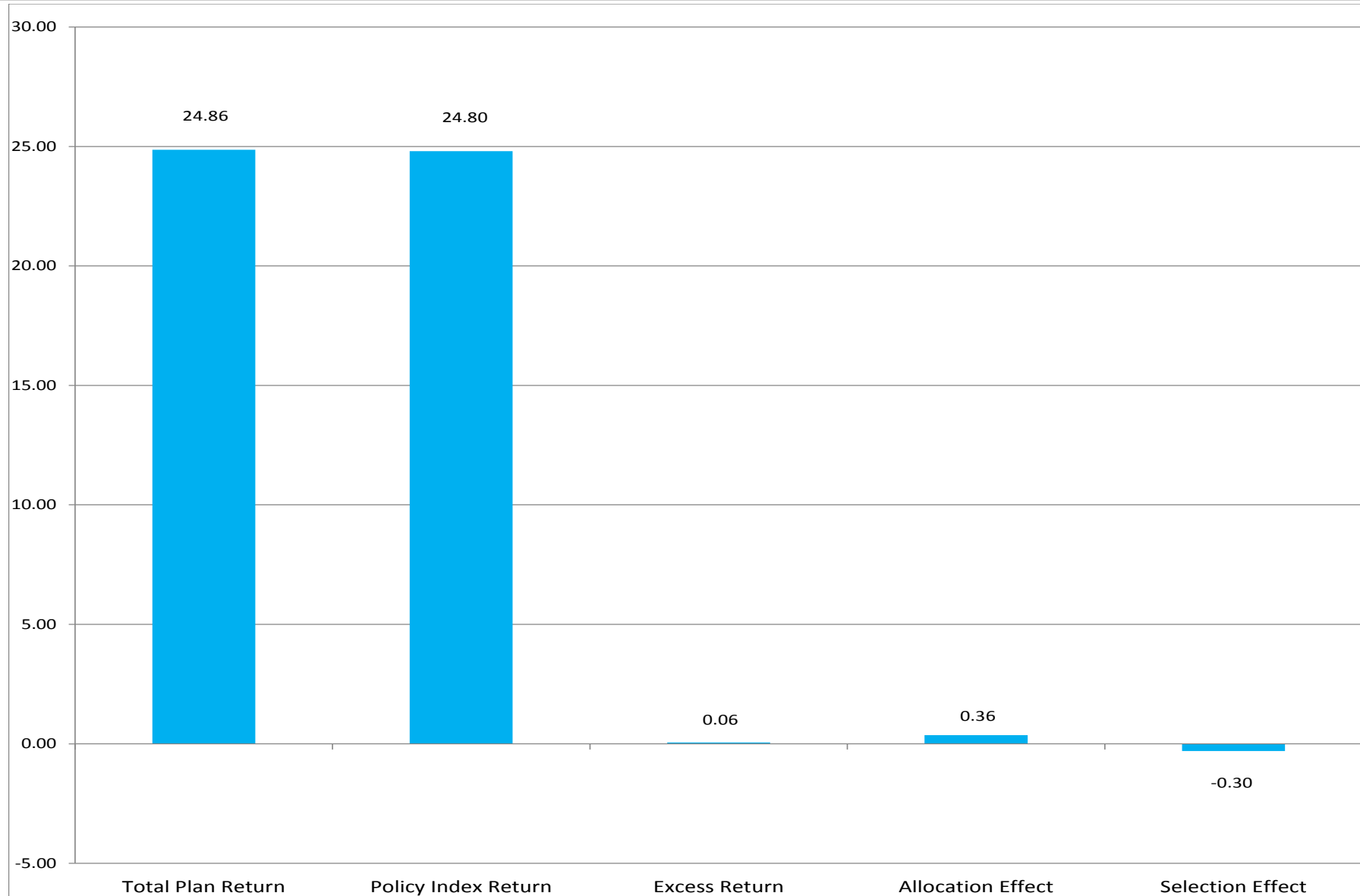
Portfolio Asset Allocation: June 30, 2021

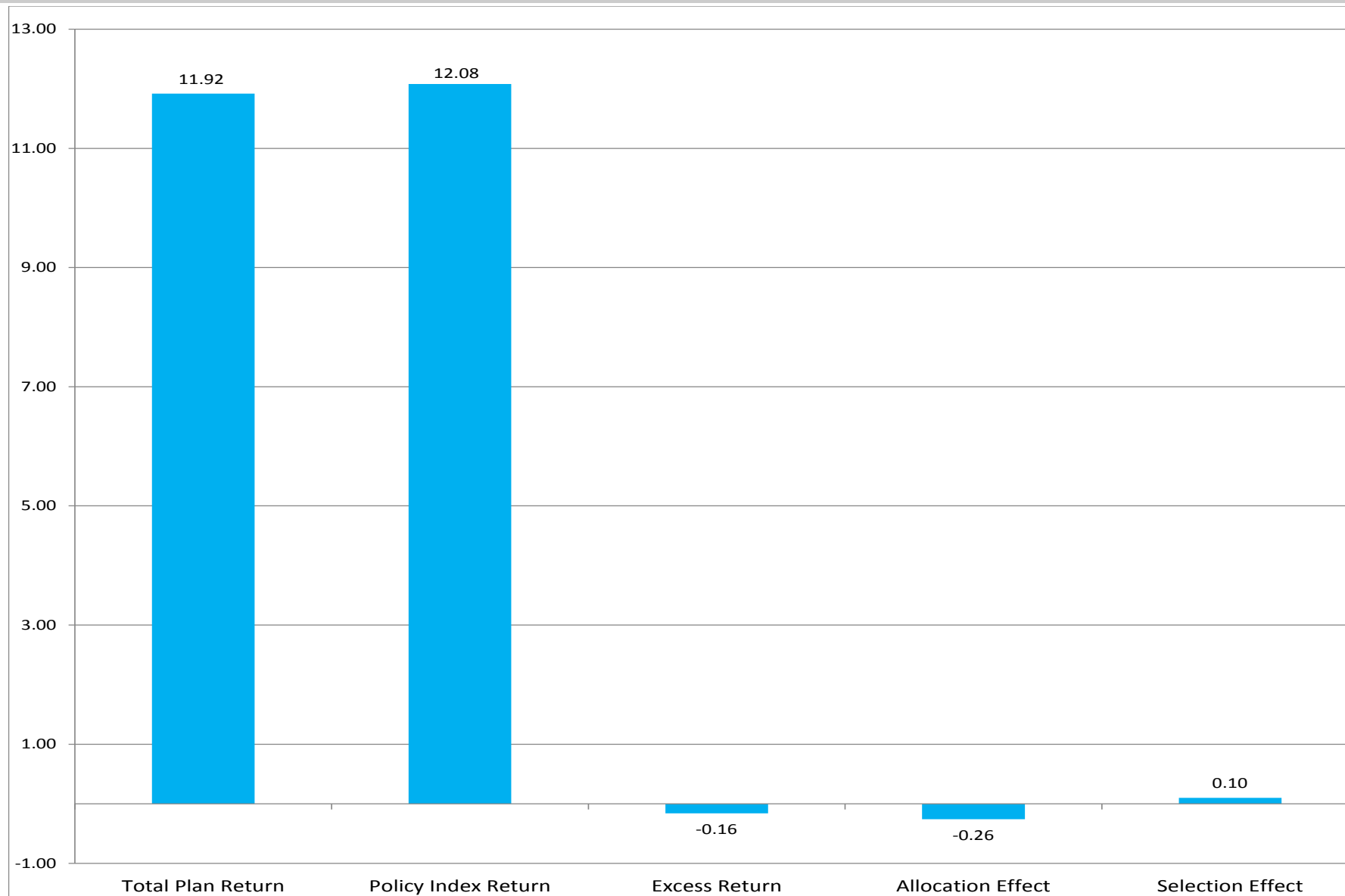
Portfolio Asset Allocation – Inflation Protection



Note: On June 30, 2021 Fire's combined Fixed Income and Cash portfolios have a duration of 7.2 years. The duration of the Bloomberg US Aggregate Index was 6.6 years on that date.









Allocation Effect - Asset Class Breakdown				
	Quarter	FYTD	3 Years	Benchmark
TOTAL FIRE	0.02	0.35	-0.26	Fire Policy Benchmark
TOTAL DOMESTIC EQUITY	0.01	-0.07	-0.14	RUSSELL 3000
TOTAL WORLD ex-USA	0.00	0.01	-0.02	MSCI World Ex USA IMI Net
TOTAL EMERGING MARKETS	0.00	0.07	0.00	MSCI Emerging Markets
TOTAL GLOBAL EQUITY	0.01	0.04	0.00	MSCI AC WORLD
TOTAL INTERNATIONAL FOF	0.00	0.00	0.00	MSCI ACWI Ex US IMI Net
TOTAL HEDGE FUNDS	0.00	-0.03	-0.01	HFRI Fund of Funds Composite Index plus 1%
TOTAL REAL ESTATE SECURITIES	0.00	-0.05	-0.11	Dow Jones US Select Securities Index
TOTAL PRIVATE EQUITY	0.00	0.01	-0.07	Russell 3K + 300bps
TOTAL PRIVATE REAL ESTATE - CORE	0.00	-0.01	-0.01	NCREIF ODCE net
TOTAL PRIVATE REAL ESTATE - NON CORE	0.00	0.00	0.00	NCREIF ODCE net + 200bps
TOTAL INFRASTRUCTURE	0.00	0.00	0.00	CPI + 4%
TOTAL US TREASURY SHORT TERM	0.05	0.47	0.23	FTSE USBIG Treasury 1-3 Y Index
TOTAL US TREASURY INTERMEDIATE	0.00	-0.01	0.00	FTSE USBIG Treasury/Agency 1-10 y
TOTAL ACTIVE GOVERNMENT	0.00	-0.23	0.29	NYC - Treasury Agency Plus Five
TOTAL US TREASURY LONG DURATION	-0.03	0.53	-0.35	FTSE Treasury 10+
TOTAL INVESTMENT GRADE CORPORATE	0.02	0.20	0.04	NYC Custom IGC Benchmark
TOTAL MORTGAGES	0.05	0.16	0.04	NYC Custom Mortgage Benchmark
TOTAL ETI	0.00	0.00	0.00	ETI Custom Benchmark
TOTAL CORE FI- DEVELOPING MGRS	-0.02	-0.12	-0.04	Bloomberg U.S. Aggregate
TOTAL HIGH YIELD	0.01	0.04	0.05	High Yield Custom Benchmark
TOTAL BANK LOANS	0.00	-0.06	0.01	Credit Suisse Lev Loan Index
TOTAL TIPS MANAGERS	0.00	0.01	-0.01	Bloomberg Global Infl-Linked: U.S. TIPS
TOTAL OPPORTUNISTIC FIXED	0.00	0.00	0.00	OFI - JPMGHY / CSFB 50/50 Blend Plus 300
TOTAL CASH	-0.07	-0.59	-0.24	

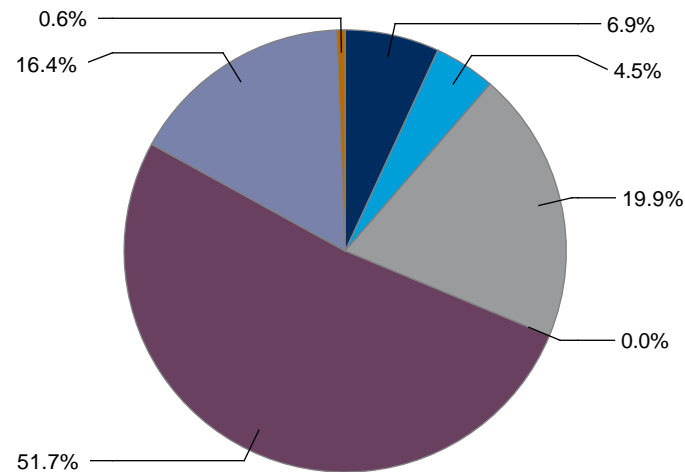
Selection Effect - Asset Class Breakdown				
	Quarter	FYTD	3 Years	Benchmark
TOTAL FIRE	0.07	-0.30	0.10	Fire Policy Benchmark
TOTAL DOMESTIC EQUITY	-0.24	-0.12	-0.32	RUSSELL 3000
TOTAL WORLD ex-USA	0.03	0.37	0.32	MSCI World Ex USA IMI Net
TOTAL EMERGING MARKETS	-0.03	0.26	0.02	MSCI Emerging Markets
TOTAL GLOBAL EQUITY	0.03	0.04	0.11	MSCI AC WORLD
TOTAL INTERNATIONAL FOF	0.01	0.01	0.01	MSCI ACWI Ex US IMI Net
TOTAL HEDGE FUNDS	-0.01	-0.40	0.06	HFRI Fund of Funds Composite Index plus 1%
TOTAL REAL ESTATE SECURITIES	0.00	0.00	0.01	Dow Jones US Select Securities Index
TOTAL PRIVATE EQUITY	0.19	-0.78	-0.14	Russell 3K + 300bps
TOTAL PRIVATE REAL ESTATE-CORE	-0.01	-0.04	0.03	NCREIF ODCE net
TOTAL PRIVATE REAL ESTATE-NON CORE	0.00	0.10	0.02	NCREIF ODCE net + 200bps
TOTAL INFRASTRUCTURE	0.00	0.08	0.05	CPI + 4%
TOTAL US TREASURY SHORT TERM	0.00	0.00	-0.01	FTSE USBIG Treasury 1-3 Y Index
TOTAL US TREASURY INTERMEDIATE	0.00	0.00	0.00	FTSE USBIG Treasury/Agency 1-10 y
TOTAL ACTIVE GOVERNMENT	0.00	0.00	0.03	NYC - Treasury Agency Plus Five
TOTAL US TREASURY LONG DURATION	0.00	-0.01	0.00	FTSE Treasury 10+
TOTAL INVESTMENT GRADE CORPORATE	0.00	0.01	0.01	NYC Custom IGC Benchmark
TOTAL MORTGAGES	0.01	0.03	0.01	NYC Custom Mortgage Benchmark
TOTAL ETI	0.00	0.00	0.01	ETI Custom Benchmark
TOTAL CORE FI- DEVELOPING MGRS	0.00	0.01	0.00	Bloomberg U.S. Aggregate
TOTAL HIGH YIELD	0.00	0.02	0.01	High Yield Custom Benchmark
TOTAL BANK LOANS	0.00	-0.02	-0.01	Credit Suisse Lev Loan Index
TOTAL TIPS MANAGERS	0.01	0.00	0.00	Bloomberg Global Infl-Linked: U.S. TIPS
TOTAL OPPORTUNISTIC FIXED	0.06	0.12	-0.04	OFI - JPMGHY / CSFB 50/50 Blend Plus 300
TOTAL CASH	0.00	0.01	0.01	

Total Domestic Equity Asset Allocations: June 30, 2021

TOTAL DOMESTIC EQUITY

Market Value (Billions)

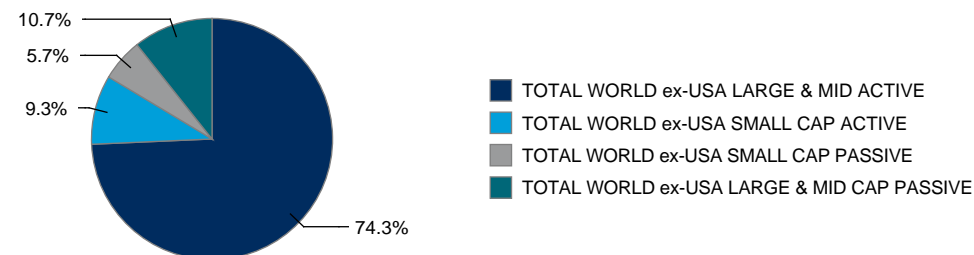
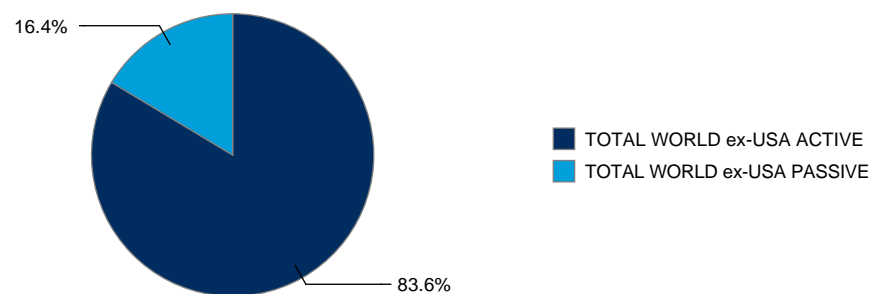
\$5.6



- TOTAL SMALL CAP ACTIVE
- TOTAL MID CAP ACTIVE
- TOTAL RUSSELL 1000 ACTIVE
- TOTAL SMALL CAP PASSIVE
- TOTAL RUSSELL 1000 PASSIVE
- TOTAL RUSSELL TOP 200 PASSIVE
- TOTAL EMERGING MANAGERS

	<u>Policy Weight</u>	<u>Actual Weight</u>	<u>Under/Over Weight</u>	<u>Quarterly Returns</u>		
				<u>Fund</u>	<u>Benchmark</u>	<u>Excess</u>
TOTAL SMALL CAP ACTIVE	6.2	6.9	0.7	3.3	4.3	(1.0)
TOTAL MID CAP ACTIVE	7.0	4.5	(2.5)	2.8	7.5	(4.7)
TOTAL RUSSELL 1000 ACTIVE	18.0	19.9	1.9	5.7	8.5	(2.8)
TOTAL SMALL CAP PASSIVE	0.0	0.0	0.0	4.1	4.3	(0.2)
TOTAL RUSSELL 1000 PASSIVE	50.0	51.8	1.8	8.5	8.5	(0.0)
TOTAL RUSSELL TOP 200 PASSIVE	18.2	16.4	(1.8)	9.0	8.9	0.1
TOTAL EMERGING MANAGERS	0.6	0.6	(0.0)	4.5	4.3	0.3

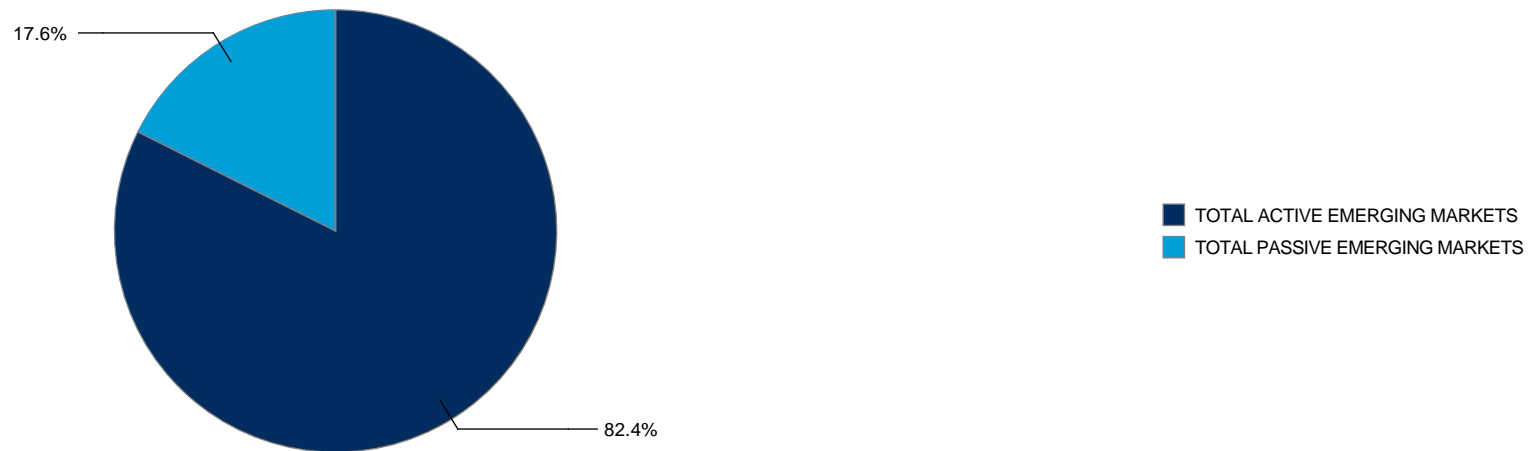
	<u>Market Value (Billions)</u>	<u>% of Plan</u>
TOTAL WORLD ex-USA	\$1.8	9.3



	<u>Asset Class Weight</u>	<u>Quarterly Returns</u>		
		<u>Fund</u>	<u>Benchmark</u>	<u>Excess</u>
TOTAL WORLD ex-USA LARGE & MID ACTIVE	74.34	5.64	5.65	(0.00)
TOTAL WORLD ex-USA SMALL CAP ACTIVE	9.27	8.47	5.31	3.16
TOTAL WORLD ex-USA SMALL CAP PASSIVE	5.73	4.90	4.81	0.09
TOTAL WORLD ex-USA LARGE & MID CAP PASSIVE	10.66	5.77	5.65	0.13
TOTAL WORLD ex-USA	100.00	5.87	5.52	0.35

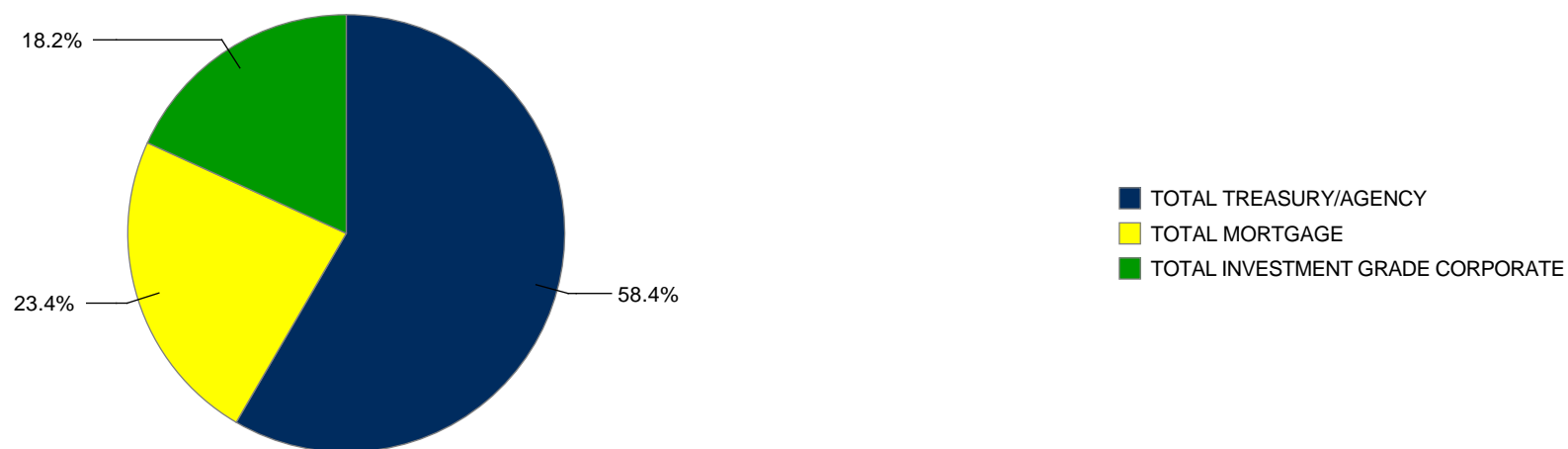


	<u>Market Value (Billions)</u>	<u>% of Plan</u>
TOTAL EMERGING MARKETS	\$1.3	6.7



	<u>Asset Class Weight</u>	<u>Quarterly Returns</u>		
		<u>Fund</u>	<u>Benchmark</u>	<u>Excess</u>
TOTAL ACTIVE EMERGING MARKETS	82.43	4.59	5.05	(0.46)
TOTAL PASSIVE EMERGING MARKETS	17.57	4.90	5.05	(0.14)
TOTAL EMERGING MARKETS	100.00	4.64	5.05	(0.41)

	<u>Market Value (Billions)</u>	<u>% of Plan</u>
TOTAL STRUCTURED+ETI	\$3.9	20.8



	<u>Policy Weight</u>	<u>Actual Weight</u>	<u>Under/Over Weight</u>	<u>Quarterly Returns</u>		
				<u>Fund</u>	<u>Benchmark</u>	<u>Excess</u>
TOTAL TREASURY/AGENCY	57.14	58.38	1.24	3.71	3.73	(0.03)
TOTAL MORTGAGE	23.81	23.37	(0.44)	0.67	0.33	0.34
TOTAL INVESTMENT GRADE CORPORATE	19.05	18.25	(0.80)	3.62	3.55	0.08

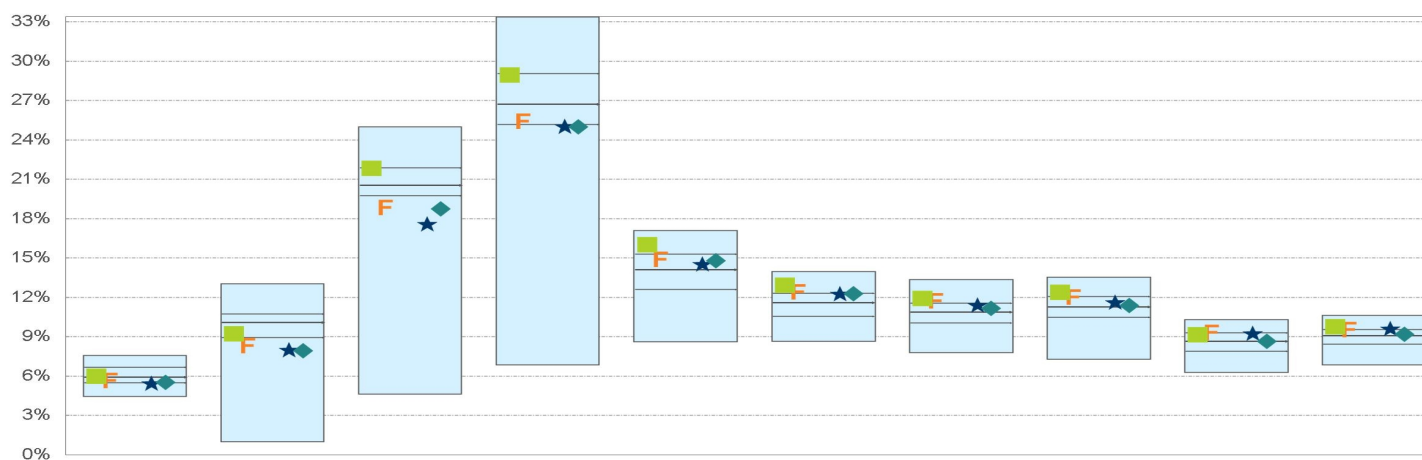


Through June 30, 2021



City of New York Performance Comparison

Total Returns of Master Trusts - Public : Plans > \$1 Billion
Cumulative Periods Ending : June 30, 2021



Percentile Rankings	1 Qtr	2 Qtrs	3 Qtrs	1 Year	2 Years	3 Years	4 Years	5 Years	7 Years	10 Years
5th	7.59	13.03	24.99	33.37	17.09	13.99	13.35	13.55	10.32	10.62
25th	6.68	10.73	21.88	29.05	15.29	12.32	11.58	12.07	9.29	9.54
50th	5.91	10.09	20.55	26.73	14.10	11.61	10.88	11.27	8.64	9.07
75th	5.48	8.95	19.74	25.18	12.62	10.57	10.07	10.49	7.89	8.45
95th	4.47	0.99	4.64	6.87	8.61	8.64	7.78	7.30	6.27	6.85
No. Of Obs	70	70	70	70	64	58	58	58	58	58
F Total System - Fire	5.45 (76)	8.13 (82)	18.66 (79)	25.23 (73)	14.69 (39)	12.20 (30)	11.52 (30)	11.83 (33)	9.11 (26)	9.35 (37)
★ Fire Policy Benchmark	5.26 (82)	7.78 (83)	17.39 (86)	24.81 (76)	14.33 (43)	12.08 (35)	11.21 (41)	11.41 (44)	9.05 (32)	9.42 (33)
■ Public Mkt Equiv 25	5.78 (60)	9.03 (73)	21.63 (30)	28.74 (26)	15.81 (9)	12.73 (16)	11.71 (19)	12.18 (16)	8.93 (33)	9.57 (23)
◆ Public Mkt Equiv 35	5.32 (80)	7.71 (86)	18.54 (80)	24.77 (76)	14.57 (40)	12.08 (35)	10.95 (48)	11.17 (53)	8.43 (57)	8.99 (51)

Wilshire Trust Universe Comparison Service® (TUCS®)



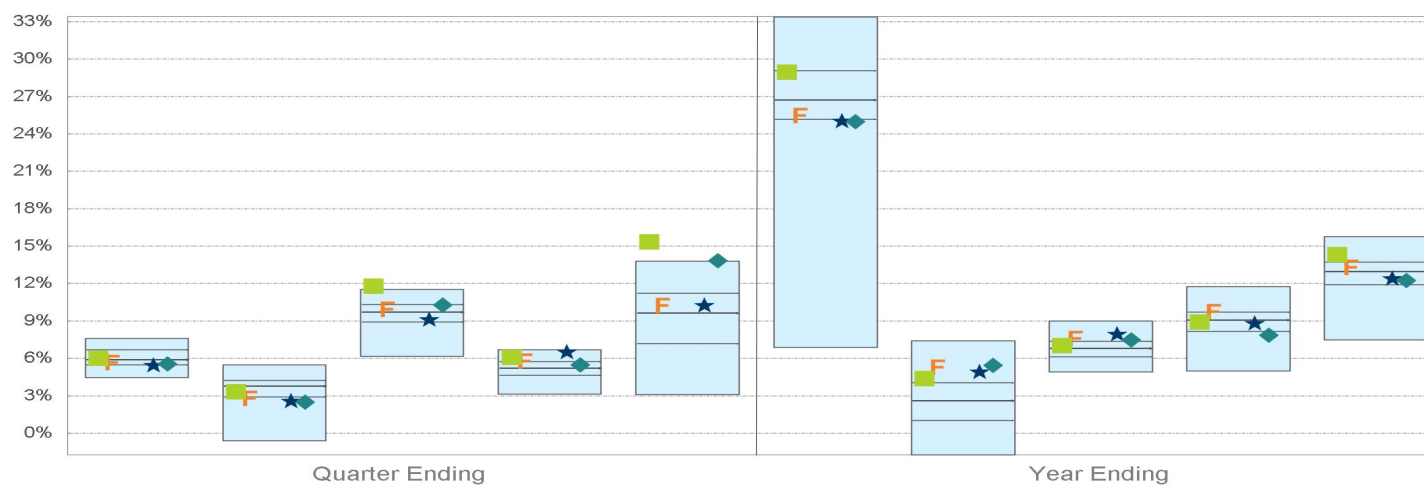
Through June 30, 2021



City of New York Performance Comparison

Total Returns of Master Trusts - Public : Plans > \$1 Billion

Consecutive Time Periods: June 30, 2021



Percentile Rankings	Jun 21	Mar 21	Dec 20	Sep 20	Jun 20	Jun 21	Jun 20	Jun 19	Jun 18	Jun 17
5th	7.59	5.49	11.52	6.70	13.78	33.37	7.39	9.00	11.76	15.77
25th	6.68	4.25	10.33	5.76	11.22	29.05	4.05	7.36	9.72	13.72
50th	5.91	3.78	9.73	5.23	9.64	26.73	2.60	6.79	9.06	12.96
75th	5.48	2.90	8.92	4.64	7.19	25.18	1.02	6.13	8.18	11.89
95th	4.47	-0.62	6.16	3.15	3.10	6.87	-1.74	4.91	5.00	7.49
No. Of Obs	70	70	70	70	70	70	64	59	60	60
F Total System - Fire	5.45 (76)	2.55 (80)	9.73 (51)	5.54 (36)	10.00 (39)	25.23 (73)	5.05 (17)	7.37 (23)	9.52 (31)	13.07 (38)
★ Fire Policy Benchmark	5.26 (82)	2.39 (83)	8.92 (76)	6.32 (9)	10.07 (38)	24.81 (76)	4.73 (20)	7.73 (19)	8.61 (61)	12.22 (70)
■ Public Mkt Equiv 25	5.78 (60)	3.08 (73)	11.55 (3)	5.85 (22)	15.12 (1)	28.74 (26)	4.17 (23)	6.81 (48)	8.70 (56)	14.09 (14)
◆ Public Mkt Equiv 35	5.32 (80)	2.27 (83)	10.06 (33)	5.26 (48)	13.60 (6)	24.77 (76)	5.21 (13)	7.25 (30)	7.64 (83)	12.03 (71)

Wilshire Trust Universe Comparison Service® (TUCS®)



FIRE RETIREMENT SYSTEM
INVESTMENT MANAGEMENT FEES INCURRED FOR FISCAL YEAR ENDED JUNE 30, 2020

INVESTMENT STYLE (EQUITIES)	Avg. Net Asset Value FY 2020 (\$MM)	Base Mgmt. Fees (\$M)	Partnership Fees (\$M)	Base Mgmt. Fees & Partnership Fees in BPS	Performance / Carry Fees in (\$M)	Performance / Carry Fees in BPS	Total Investment Mgmt. Fees in (\$M)	Total Investment Mgmt. Fees in BPS
Total US Equities	4,490.51	3,034.63	-	6.76	1,121.52	2.50	4,156.15	9.26
Small Cap Active:	344.62	1,574.94	-	45.70	-	-	1,574.94	45.70
Small Cap Growth	120.87	801.90	-	66.34	-	-	801.90	66.34
Small Cap Value	162.44	667.04	-	41.06	-	-	667.04	41.06
Small Cap Core	61.31	106.00	-	17.29	-	-	106.00	17.29
Small Cap Fundamental Index	-	-	-	-	-	-	-	-
Mid Cap Active:	171.48	514.50	-	30.00	1,121.52	65.40	1,636.02	-
Mid Cap Growth	-	-	-	-	-	-	-	-
Mid Cap Value	-	-	-	-	-	-	-	-
Mid Cap Core	171.48	514.50	-	30.00	1,121.52	65.40	1,636.02	95.41
Other Active:								
Russell 1000 Fundamental	791.82	756.37	-	9.55	-	-	756.37	9.55
Legato (Emerging Manager- Equity)	20.19	100.62	-	49.83	-	-	100.62	49.83
U.S. Environmental Managers	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Total US Active Equities	1,328.11	2,946.43	-	22.19	1,121.52	8.44	4,067.95	30.63
Small Cap Passive:								
Small Cap Passive	35.87	1.52	-	0.42	-	-	1.52	0.42
Mid Cap Passive:								
Mid Cap Passive	-	-	-	-	-	-	-	-
Russell / S&P Passive:								
Russell 1000 Growth Passive	-	-	-	-	-	-	-	-
Russell 1000 Value Passive	-	-	-	-	-	-	-	-
Russell 1000 Core Passive	2,418.14	48.03	-	0.20	-	-	48.03	0.20
Passive Russell 3000	-	-	-	-	-	-	-	-
Passive S&P 500	-	-	-	-	-	-	-	-
Passive Russell Top 200	708.39	38.64	-	0.55	-	-	38.64	0.55
Total US Passive Equities	3,162.40	88.19	-	0.28	-	-	88.19	0.28

FIRE RETIREMENT SYSTEM
INVESTMENT MANAGEMENT FEES INCURRED FOR FISCAL YEAR ENDED JUNE 30, 2020

	Avg. Net Asset Value FY 2020 (\$MM)	Base Mgmt. Fees (\$M)	Partnership Fees (\$M)	Base Mgmt. Fees & Partnership Fees in BPS	Performance / Carry Fees in (\$M)	Performance / Carry Fees in BPS	Total Investment Mgmt. Fees in (\$M)	Total Investment Mgmt. Fees in BPS
Total International Equities	2,692.76	5,700.82	-	21.17	-	-	5,700.82	21.17
Global Equity	227.87	1,253.92	-	55.03	-	-	1,253.92	55.03
Active Total Global Equities	227.87	1,253.92	-	55.03	-	-	1,253.92	55.03
Active Total World Ex USA:	1,288.71	2,968.61	-	23.04	-	-	2,968.61	23.04
World Ex-USA Large & Mid Developed Growth Active	671.53	1,331.94	-	19.83	-	-	1,331.94	19.83
World Ex-USA Large & Mid Developed Value Active	511.13	1,249.78	-	24.45	-	-	1,249.78	24.45
World Ex-USA Developed Small Cap Active	106.05	386.89	-	36.48	-	-	386.89	36.48
Total World Ex USA	-	-	-	-	-	-	-	-
NON-U.S. Activist	-	-	-	-	-	-	-	-
NON-U.S. Environmental Managers	-	-	-	-	-	-	-	-
Active Emerging Markets	881.00	2,381.18	-	27.03	-	-	2,381.18	27.03
International Fund of Funds	71.57	243.36	-	34.00	-	-	243.36	34.00
Total Active International Equities	2,241.28	5,593.16	-	24.96	-	-	5,593.16	24.96
Int'l Passive Equities:								
World Ex-USA Small Cap Passive	64.14	20.70	-	3.23	-	-	20.70	3.23
World Ex-USA Large & Mid Cap Passive	128.59	15.20	-	1.18	-	-	15.20	1.18
Passive Global	-	-	-	-	-	-	-	-
Passive Emerging Markets	258.75	71.76	-	2.77	-	-	71.76	2.77
Total Int'l Passive Equities	451.48	107.66	-	2.38	-	-	107.66	2.38
REITS Active Equities	178.36	715	-	40.06	-	-	715	40.06
Total Equities	7,589.50	10,703.92	-	14.10	1,121.52	1.48	11,825.44	15.58

FIRE RETIREMENT SYSTEM
INVESTMENT MANAGEMENT FEES INCURRED FOR FISCAL YEAR ENDED JUNE 30, 2020

INVESTMENT STYLE (FIXED INCOME)	Avg. Net Asset Value FY 2020 (\$MM)	Base Mgmt. Fees (\$M)	Partnership Fees (\$M)	Base Mgmt. Fees & Partnership Fees in BPS	Performance / Carry Fees in (\$M)	Performance / Carry Fees in BPS	Total Investment Mgmt. Fees in (\$M)	Total Investment Mgmt. Fees in BPS
Total Fixed Income	4,774.12	6,071.04	-	12.72	-	-	6,071.04	12.72
Structured Program:	2,431.26	962.77	-	3.96	-	-	962.77	3.96
Government Treas/Agency Sector	976.53	339.06	-	3.47	-	-	339.06	3.47
Long Duration Treasury	589.42	58.01	-	0.98	-	-	58.01	0.98
Mortgage Sector	426.45	193.42	-	4.54	-	-	193.42	4.54
Investment Grade Credit Sector	438.85	372.28	-	8.48	-	-	372.28	8.48
Developing Managers	69.10	101.01	-	14.62	-	-	101.01	14.62
Emerging Managers	25.72	93.32	-	36.29	-	-	93.32	36.29
TIPS:	669.07	113.82	-	1.70	-	-	113.82	1.70
Active TIPS Managers	186.65	89.82	-	4.81	-	-	89.82	4.81
Passive TIPS Managers	482.42	24.00	-	0.50	-	-	24.00	0.50
High Yield	835.70	2,691.27	-	32.20	-	-	2,691.27	32.20
Bank Loans	210.69	769.20	-	36.51	-	-	769.20	36.51
Convertible Bonds	223.12	1,095.24	-	49.09	-	-	1,095.24	49.09
ETI - Access - RBC	28.29	50.23	-	17.75	-	-	50.23	17.75
ETI - AFL-CIO HIT	61.07	194.17	-	31.79	-	-	194.17	31.79
Other ETI Programs (Internally Managed)	27.74	-	-	-	-	-	-	-
Short Term (Internally Managed)	192.36	-	-	-	-	-	-	-
Total Public Markets	12,363.62	16,774.96	-	13.57	1,121.52	0.91	17,896.48	14.48

FIRE RETIREMENT SYSTEM
INVESTMENT MANAGEMENT FEES INCURRED FOR FISCAL YEAR ENDED JUNE 30, 2020

INVESTMENT STYLE (PRIVATE MARKETS)	Avg. Net Asset Value FY 2020 (\$MM)	Base Mgmt. Fees (\$M)	Partnership Fees (\$M)	Base Mgmt. Fees & Partnership Fees in BPS	Performance / Carry Fees in (\$M)	Performance / Carry Fees in BPS	Total Investment Mgmt. Fees in (\$M)	Total Investment Mgmt. Fees in BPS
Hedge Funds	872.92	8,557.51	650.19	105.48	5,999.62	68.73	15,207.33	174.21
Private Equity	976.64	14,009.77	2,712.14	171.22	11,659.06	119.38	28,380.97	290.60
Private Real Estate	689.70	6,233.04	2,162.73	121.73	4,177.40	60.57	12,573.17	182.30
Infrastructure	149.18	2,903.59	291.07	111.31	251.19	8.75	3,445.85	120.06
Opportunistic Fixed Income	476.90	4,195.68	1,312.04	115.49	456.48	9.57	5,964.20	125.06
Total Private Markets	3,165.34	35,899.59	7,128.18	135.93	22,543.75	71.22	65,571.52	207.15
Total Overall	15,528.96	52,674.56	7,128.18	38.51	23,665.27	15.24	83,468.00	53.75

The overall carried interest and performance incentive fees paid by FIRE for the Fiscal Year: 15.24 BPS

General Footnotes:

- 1) Infrastructure's fees in bps are based off total committed amounts rather than Avg. NAV due to its early fund life juncture. The total committed amount as of 6/30/20 for Fire is : \$287m
- 2) Private Market expense data is limited to the partnerships that have provided ILPA files. In the event where there is no ILPA, GP financial statements are prorated for each of the participants of the partnership and/or adjusted for cash flow expenses reported by our custodian bank.

NYC FIRE DEPARTMENT PENSION FUND
SECURITIES LENDING INCOME
June 30, 2021

	U. S. FIXED INCOME	U. S. EQUITY	INTERNATIONAL EQUITY	TOTAL
1989	109,000	-	-	109,000
1990	104,000	-	-	104,000
1991	157,000	-	-	157,000
1992	429,000	47,000	48,000	524,000
1993	762,000	146,000	102,000	1,010,000
1994	693,000	267,000	102,000	1,062,000
1995	495,000	306,000	96,000	897,000
1996	455,000	228,000	179,000	862,000
1997	473,000	512,000	257,000	1,242,000
1998	789,000	552,000	356,000	1,697,000
1999	716,000	690,000	408,000	1,814,000
2000	734,000	897,000	408,000	2,039,000
2001	1,176,000	1,286,000	561,000	3,023,000
2002	671,000	1,162,000	506,000	2,339,000
2003	349,000	644,000	452,000	1,445,000
2004	505,000	670,000	462,000	1,637,000
2005	740,000	1,070,000	574,000	2,384,000
2006	599,000	1,753,000	713,000	3,065,000
2007	1,437,000	3,180,000	786,000	5,403,000
2008	4,172,000	6,798,000	1,236,000	12,206,000
2009	1,606,000	3,588,000	817,000	6,011,000
2010	760,000	2,047,000	563,000	3,370,000
2011	977,000	2,674,000	927,000	4,578,000
2012	1,229,000	3,324,000	832,000	5,385,000
2013	893,000	3,467,000	704,000	5,064,000
2014	756,000	2,028,000	1,739,000	4,523,000
2015	788,000	2,034,000	2,407,000	5,229,000
2016	807,000	3,245,000	2,094,000	6,146,000
2017	1,285,000	2,515,000	1,574,000	5,374,000
2018	1,100,230	2,442,001	1,489,477	5,031,708
2019	693,784	2,129,087	1,094,881	3,917,752
2020	780,299	1,002,944	638,140	2,421,383
2021 (6 months)	764,115	559,873	97,024	1,421,011
Since Inception	28,004,428	51,263,904	22,222,522	101,490,854

New York City
Fire Department Pension Fund, Subchapter Two

Appendix A

Consolidated Performance Report

Consolidated Performance Report

Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE 2020	CYE 2020	CYE 2019	CYE 2018	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
SYSTEM RETURN SUMMARY															
5 FIRE-TOTAL PORTFOLIO - GROSS	18,980	100.00	5.45	25.23	8.13	5.05	14.70	17.95	(2.27)	25.23	12.20	11.83	9.35	8.93	07/01/1987
FIRE - ESTIMATED INVESTMENT FEES			(0.10)	(0.36)	(0.18)	(0.24)	(0.26)	(0.29)	(0.20)	(0.36)	(0.28)	(0.26)			
EST MANAGEMENT FEES - PUBLIC MARKET (ACCRUAL)			(0.04)	(0.12)	(0.07)	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)	(0.13)	(0.12)			
EST MANAGEMENT FEES - ALTERNATIVE MARKETS (CASH)			(0.06)	(0.24)	(0.11)	(0.12)	(0.14)	(0.17)	(0.08)	(0.24)	(0.15)	(0.14)			
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
FIRE-TOTAL PORTFOLIO - NET MGR			5.35	24.86	7.95	4.81	14.44	17.67	(2.47)	24.86	11.92	11.57			
FIRE POLICY BENCHMARK			5.26	24.80	7.78	4.73	13.78	19.05	(2.67)	24.80	12.08	11.41	9.42		
EXCESS RETURN			0.09	0.06	0.17	0.08	0.65	(1.38)	0.20	0.06	(0.17)	0.16	(0.06)		
EQUITY RETURN DETAIL															
26 FIRE-TOTAL EQUITY (INCLUDES ALTERNATIVES & REITS) - GROSS	12,290	64.75	6.72	38.24	12.55	2.98	17.50	22.15	(3.59)	38.24	15.10	15.35	11.65	9.38	04/01/2004
ESTIMATED INVESTMENT FEES			(0.14)	(0.54)	(0.26)	(0.29)	(0.34)	(0.36)	(0.24)	(0.54)	(0.37)	(0.34)			
EST MANAGEMENT FEES			(0.14)	(0.54)	(0.26)	(0.29)	(0.34)	(0.36)	(0.24)	(0.54)	(0.37)	(0.34)			
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
FIRE-TOTAL EQUITY (INCLUDES ALTERNATIVES & REITS) - NET MGR			6.58	37.70	12.29	2.69	17.17	21.79	(3.82)	37.70	14.73	15.02			
34 FIRE-TOTAL EQUITY - GROSS	9,048	47.67	6.85	43.54	12.71	2.85	20.21	27.62	(8.64)	43.54	16.11	16.49	11.88	9.48	04/01/2004
ESTIMATED INVESTMENT FEES			(0.07)	(0.28)	(0.12)	(0.17)	(0.22)	(0.21)	(0.15)	(0.28)	(0.21)	(0.20)			
EST MANAGEMENT FEES			(0.07)	(0.28)	(0.12)	(0.17)	(0.22)	(0.21)	(0.15)	(0.28)	(0.21)	(0.20)			
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
FIRE-TOTAL EQUITY - NET MGR			6.78	43.26	12.59	2.68	19.99	27.41	(8.79)	43.26	15.90	16.29			
42 FIRE-TOTAL DOMESTIC EQUITY - GROSS	5,557	29.28	7.46	43.77	15.03	4.66	19.14	30.08	(5.44)	43.77	17.70	17.34	14.23	12.70	08/01/1979
ESTIMATED INVESTMENT FEES			(0.05)	(0.15)	(0.08)	(0.09)	(0.12)	(0.12)	(0.09)	(0.15)	(0.12)	(0.11)			
FIRE-TOTAL DOMESTIC EQUITY - NET MGR			7.41	43.62	14.96	4.57	19.02	29.96	(5.53)	43.62	17.58	17.23			
RUSSELL 3000 (DAILY)			8.24	44.16	15.11	6.53	20.89	31.02	(5.24)	44.16	18.73	17.89	14.70	12.18	
EXCESS RETURN			(0.83)	(0.55)	(0.15)	(1.96)	(1.86)	(1.06)	(0.29)	(0.55)	(1.15)	(0.66)	(0.47)	0.53	
52 FIRE-TOTAL SMALL CAP - GROSS	384	2.02	3.74	48.69	12.28	(3.15)	22.75	24.28	(9.88)	48.69	13.00	15.37	12.45	8.93	04/01/2004
ESTIMATED INVESTMENT FEES			(0.40)	(1.22)	(0.60)	(0.52)	(0.72)	(0.61)	(0.47)	(1.22)	(0.70)	(0.70)			
FIRE-TOTAL SMALL CAP - NET MGR			3.33	47.47	11.69	(3.67)	22.03	23.67	(10.34)	47.47	12.31	14.67			
RUSSELL 2000 (DAILY)			4.29	62.03	17.54	(6.63)	19.96	25.52	(11.01)	62.03	13.52	16.47	12.34	9.68	
EXCESS RETURN			(0.96)	(14.56)	(5.85)	2.96	2.07	(1.86)	0.67	(14.56)	(1.21)	(1.79)	0.12	(0.75)	
62 FIRE-TOTAL MID CAP - GROSS	249	1.31	3.21	44.22	8.79	0.77	26.31	30.43	(14.21)	44.22	14.18	15.76	13.25	9.94	04/01/2004
ESTIMATED INVESTMENT FEES			(0.36)	(0.84)	(0.46)	(0.95)	(1.19)	(1.01)	(0.53)	(0.84)	(0.97)	(0.79)			
FIRE-TOTAL MID CAP - NET MGR			2.85	43.38	8.32	(0.18)	25.12	29.42	(14.74)	43.38	13.21	14.96			
RUSSELL MIDCAP (DAILY)			7.50	49.80	16.25	(2.24)	17.10	30.54	(9.06)	49.80	16.45	15.62	13.24	11.01	
EXCESS RETURN			(4.65)	(6.42)	(7.93)	2.06	8.02	(1.12)	(5.68)	(6.42)	(3.23)	(0.65)	0.02	(1.07)	

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EQUITY RETURN DETAIL															
74	FIRE-TOTAL RUSSELL 1000 - GROSS	3,981	20.97	7.74	43.88	15.76	4.32	17.71	30.08	43.88	17.98			17.82	04/01/2018
	ESTIMATED INVESTMENT FEES			(0.01)	(0.04)	(0.02)	(0.03)	(0.03)	(0.02)	(0.04)	(0.03)			(0.03)	
	FIRE-TOTAL RUSSELL 1000 - NET MGR			7.73	43.84	15.75	4.29	17.68	30.06	43.84	17.95			17.79	
	RUSSELL 1000 (DAILY)			8.54	43.07	14.95	7.48	20.96	31.43	43.07	19.16			18.84	
	EXCESS RETURN			(0.80)	0.77	0.80	(3.19)	(3.28)	(1.37)	0.77	(1.21)			(1.05)	
84	FIRE-TOTAL RUSSELL TOP 200 PASSIVE - GROSS	910	4.80	8.98	40.81	14.56	11.25	22.40	31.77	40.81	20.25			20.31	05/01/2018
	ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.00)	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)			(0.01)	
	FIRE-TOTAL RUSSELL TOP 200 PASSIVE - NET MGR			8.98	40.81	14.56	11.24	22.39	31.77	40.81	20.24			20.30	
	RUSSELL TOP 200 INDEX (DAILY)			8.93	40.81	14.50	11.20	22.37	31.75	40.81	20.19			20.26	
	EXCESS RETURN			0.05	(0.00)	0.06	0.04	0.02	0.02	(0.00)	0.05			0.04	
94	FIRE-TOTAL FUND OF FUNDS - GROSS	32	0.17	4.74	67.85	21.72	(7.81)	19.88	23.94	(7.75)	67.85	15.83		14.99	05/01/2017
	ESTIMATED INVESTMENT FEES			(0.19)	(0.95)	(0.38)	(0.46)	(0.60)	(0.62)	(0.46)	(0.95)	(0.60)		(0.63)	
	FIRE-TOTAL FUND OF FUNDS - NET MGR			4.54	66.90	21.35	(8.27)	19.28	23.33	(8.21)	66.90	15.23		14.36	
	RUSSELL 2000 (DAILY)			4.29	62.03	17.54	(6.63)	19.96	25.52	(11.01)	62.03	13.52		14.26	
	EXCESS RETURN			0.25	4.88	3.81	(1.64)	(0.68)	(2.20)	2.80	4.88	1.72		0.09	

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EQUITY RETURN DETAIL															
106 FIRE-TOTAL WORLD ex-USA - GROSS	1,756	9.25	5.93	40.92	8.73	1.34	21.42	25.27	(14.17)	40.92	12.73	14.61	8.12	7.70	04/01/2004
ESTIMATED INVESTMENT FEES			(0.06)	(0.34)	(0.13)	(0.25)	(0.30)	(0.31)	(0.24)	(0.34)	(0.28)	(0.30)			
FIRE-TOTAL WORLD ex-USA - NET MGR			5.87	40.58	8.60	1.09	21.12	24.96	(14.41)	40.58	12.45	14.32			
WORLD EX-USA CUSTOM BM			5.52	34.82	9.92	(5.11)	8.32	22.91	(14.68)	34.82	8.62	10.77	6.33	6.41	
EXCESS RETURN			0.35	5.77	(1.32)	6.20	12.79	2.05	0.28	5.77	3.83	3.55	1.79	1.30	
116 FIRE-TOTAL WORLD ex-USA LARGE & MID ACTIVE - GROSS	1,306	6.88	5.72	40.22	7.37	3.08	24.47	25.96	(13.36)	40.22	13.65	15.38		8.80	11/01/2013
ESTIMATED INVESTMENT FEES			(0.07)	(0.39)	(0.15)	(0.29)	(0.36)	(0.35)	(0.24)	(0.39)	(0.32)	(0.31)		(0.30)	
FIRE-TOTAL WORLD ex-USA LARGE & MID ACTIVE - NET MGR			5.64	39.83	7.22	2.79	24.11	25.62	(13.60)	39.83	13.33	15.06		8.50	
NYC CUSTOM WORLD EX-USA LG & MID ACT INDEX			5.65	33.60	9.92	(5.42)	7.59	22.49	(14.09)	33.60	8.57	10.48		5.60	
EXCESS RETURN			(0.00)	6.23	(2.70)	8.21	16.52	3.13	0.49	6.23	4.75	4.58		2.91	
126 FIRE-TOTAL WORLD ex-USA SMALL CAP ACTIVE - GROSS	163	0.86	8.55	55.37	17.98	(1.69)	19.00	22.69	(18.26)	55.37	12.68	14.94		11.38	05/01/2013
ESTIMATED INVESTMENT FEES			(0.09)	(0.51)	(0.19)	(0.34)	(0.37)	(0.50)	(0.39)	(0.51)	(0.42)	(0.48)			
FIRE-TOTAL WORLD ex-USA SMALL CAP ACTIVE - NET MGR			8.47	54.86	17.79	(2.03)	18.63	22.18	(18.65)	54.86	12.26	14.46			
S&P EPAC SMALL CAP USD NET			5.31	42.23	9.16	(4.00)	13.78	23.71	(18.58)	42.23	8.53	11.83		9.11	
EXCESS RETURN			3.16	12.63	8.63	1.97	4.84	(1.52)	(0.07)	12.63	3.73	2.63		2.27	
136 FIRE-TOTAL WORLD ex-USA SMALL CAP PASSIVE - GROSS	101	0.53	4.91	42.51	10.05	(2.88)	13.20	25.50	(17.95)	42.51	9.19	12.59		8.86	02/01/2014
ESTIMATED INVESTMENT FEES			(0.01)	(0.04)	(0.02)	(0.03)	(0.04)	(0.03)	(0.02)	(0.04)	(0.03)	(0.04)		(0.03)	
FIRE-TOTAL WORLD ex-USA SMALL CAP PASSIVE - NET MGR			4.90	42.47	10.03	(2.91)	13.16	25.46	(17.97)	42.47	9.16	12.55		8.83	
WORLD EX USA SC PASSIVE CUSTOM BM			4.81	42.28	9.92	(3.20)	12.78	25.41	(18.07)	42.28	8.92	12.37		8.54	
EXCESS RETURN			0.09	0.19	0.11	0.29	0.38	0.05	0.10	0.19	0.23	0.18		0.29	
146 FIRE-TOTAL WORLD ex-USA LARGE & MID CAP PASSIVE - GROSS	187	0.99	5.78	34.02	10.07	(5.09)	8.10	22.76	(13.63)	34.02	9.04	10.65	6.23	6.26	02/01/2011
ESTIMATED INVESTMENT FEES			(0.00)	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)			
FIRE-TOTAL WORLD ex-USA LARGE & MID CAP PASSIVE - NET MGR			5.77	34.01	10.07	(5.11)	8.09	22.75	(13.64)	34.01	9.03	10.64			
NYC CUSTOM WORLD EX US INDEX			5.65	33.60	9.92	(5.42)	7.59	22.49	(14.09)	33.60	8.57	10.29	5.90	5.92	
EXCESS RETURN			0.13	0.40	0.15	0.31	0.50	0.26	0.45	0.40	0.46	0.35	0.33	0.34	

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EQUITY RETURN DETAIL															
158 FIRE-TOTAL EMERGING MARKETS - GROSS	1,273	6.71	4.76	46.67	8.83	(7.57)	17.40	17.93	(14.40)	46.67	11.60	13.84	5.06	7.63	09/01/1996
ESTIMATED INVESTMENT FEES			(0.12)	(0.62)	(0.24)	(0.28)	(0.42)	(0.33)	(0.23)	(0.62)	(0.37)	(0.37)			
FIRE-TOTAL EMERGING MARKETS - NET MGR			4.64	46.05	8.59	(7.85)	16.98	17.60	(14.63)	46.05	11.22	13.47			
MSCI EMERGING MARKETS			5.05	40.90	7.45	(3.39)	18.31	18.42	(14.57)	40.90	11.27	13.03	4.28		
EXCESS RETURN			(0.41)	5.14	1.14	(4.46)	(1.33)	(0.83)	(0.06)	5.14	(0.05)	0.44	0.78		
168 FIRE-TOTAL ACTIVE EMERGING MARKETS - GROSS	1,049	5.53	4.73	48.16	9.10	(9.26)	16.62	17.59	(14.39)	48.16	11.46	14.10	5.33	9.67	04/01/2004
ESTIMATED INVESTMENT FEES			(0.14)	(0.80)	(0.29)	(0.39)	(0.58)	(0.47)	(0.34)	(0.80)	(0.51)	(0.51)			
FIRE-TOTAL ACTIVE EMERGING MARKETS - NET MGR			4.59	47.36	8.81	(9.65)	16.04	17.12	(14.73)	47.36	10.96	13.59			
MSCI EMERGING MARKETS			5.05	40.90	7.45	(3.39)	18.31	18.42	(14.57)	40.90	11.27	13.03	4.28	8.82	
EXCESS RETURN			(0.46)	6.46	1.36	(6.26)	(2.26)	(1.30)	(0.16)	6.46	(0.32)	0.56	1.04	0.85	
178 FIRE-TOTAL PASSIVE EMERGING MARKETS - GROSS	224	1.18	4.91	40.69	7.77	(3.74)	17.29	18.74	(14.44)	40.69	11.17	12.98	4.30	4.07	04/01/2011
ESTIMATED INVESTMENT FEES			(0.01)	(0.03)	(0.01)	(0.02)	(0.02)	(0.03)	0.01	(0.03)	(0.02)	(0.04)			
FIRE-TOTAL PASSIVE EMERGING MARKETS - NET MGR			4.90	40.66	7.76	(3.76)	17.27	18.72	(14.43)	40.66	11.14	12.94			
MSCI EMERGING MARKETS			5.05	40.90	7.45	(3.39)	18.31	18.42	(14.57)	40.90	11.27	13.03	4.28	4.06	
EXCESS RETURN			(0.14)	(0.24)	0.31	(0.37)	(1.04)	0.29	0.14	(0.24)	(0.13)	(0.09)	0.01	0.01	
188 FIRE-TOTAL INTERNATIONAL FUND OF FUNDS - GROSS	100	0.53	8.50	40.74	10.19	(2.10)	17.02	22.57	(14.36)	40.74	11.54			11.26	05/01/2017
ESTIMATED INVESTMENT FEES			(0.29)	(0.70)	(0.35)	(0.33)	(0.41)	(0.42)	(0.30)	(0.70)	(0.44)			(0.42)	
FIRE-TOTAL INTERNATIONAL FUND OF FUNDS - NET MGR			8.21	40.05	9.83	(2.43)	16.62	22.15	(14.65)	40.05	11.10			10.84	
MSCI ACWI EX USA IMI NET			5.60	37.18	9.58	(4.74)	11.12	21.63	(14.76)	37.18	9.42			9.53	
EXCESS RETURN			2.62	2.87	0.26	2.31	5.50	0.52	0.10	2.87	1.67			1.31	
198 FIRE-TOTAL GLOBAL EQUITY - GROSS	361	1.90	8.99	43.21	9.54	16.60	39.76	36.71		43.21	22.40			21.41	06/01/2018
ESTIMATED INVESTMENT FEES			(0.14)	(0.77)	(0.29)	(0.64)	(0.77)	(0.79)		(0.77)	(0.67)			(0.67)	
FIRE-TOTAL GLOBAL EQUITY - NET MGR			8.85	42.43	9.25	15.96	39.00	35.92		42.43	21.73			20.74	
MSCI AC WORLD (DAILY CONST)			7.39	39.26	12.30	2.11	16.25	26.60		39.26	14.57			13.95	
EXCESS RETURN			1.46	3.17	(3.05)	13.85	22.74	9.32		3.17	7.17			6.79	

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ALTERNATIVE EQUITY RETURN DETAIL																
216	FIRE-TOTAL HEDGE FUNDS* - NET MGR	924	4.87	3.03	13.70	3.74	6.68	17.52	5.64	2.09	13.70	8.39	8.43	5.36	5.36	07/01/2011
	HFRI FUND OF FUNDS COMPOSITE INDEX + 1%			3.12	19.46	5.47	1.45	11.98	9.47	(3.06)	19.46	7.38	7.18	4.89	4.89	
	EXCESS RETURN			(0.09)	(5.75)	(1.73)	5.23	5.54	(3.83)	5.14	(5.75)	1.01	1.25	0.47	0.47	
226	FIRE-TOTAL DIRECT HEDGE FUNDS* - NET MGR	924	4.87	3.03	13.70	3.74	6.68	17.53	5.64	2.17	13.70	8.39	8.59		6.23	01/01/2012
	HFRI FUND OF FUNDS COMPOSITE INDEX + 1%			3.12	19.46	5.47	1.45	11.98	9.47	(3.06)	19.46	7.38	7.18		5.72	
	EXCESS RETURN			(0.09)	(5.75)	(1.73)	5.23	5.55	(3.83)	5.23	(5.75)	1.01	1.41		0.51	
236	FIRE-TOTAL PERMAL HEDGE FUNDS OF FUNDS* - NET MGR	-	0.00	(0.84)	6.00	(3.52)	(6.49)	(0.01)	6.26	(0.84)	6.00	(0.19)	1.53	1.66	1.66	07/01/2011
	HFRI FUND OF FUNDS COMPOSITE INDEX + 1%			3.12	19.46	5.47	1.45	11.98	9.47	(3.06)	19.46	7.38	7.18	4.89	4.89	
	EXCESS RETURN			(3.96)	(13.46)	(8.99)	(7.94)	(11.99)	(3.20)	2.22	(13.46)	(7.57)	(5.65)	(3.23)	(3.23)	

* INFORMATION PROVIDED BY ALPHA FRONTIER

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ALTERNATIVE EQUITY RETURN DETAIL															
244 FIRE-TOTAL REAL ESTATE SECURITIES - GROSS	-	0.00				(14.46)		24.32	(6.09)						01/01/2003
ESTIMATED INVESTMENT FEES						(0.33)		(0.48)	(0.39)						
FIRE-TOTAL REAL ESTATE SECURITIES - NET MGR						(14.79)		23.83	(6.48)						
DJ US SELECT REAL ESTATE SECURITIES INDEX						(17.71)		23.10	(4.22)						
EXCESS RETURN						2.92		0.73	(2.26)						
254 FIRE-TOTAL PRIVATE EQUITY (TIME WEIGHTED) - GROSS	1,312	6.91	10.89	51.66	23.14	2.29	16.75	12.96	18.87	51.66	21.11	20.69	15.72	14.86	04/01/2004
ESTIMATED INVESTMENT FEES			(0.55)	(2.52)	(1.32)	(0.94)	(1.12)	(1.20)	(0.89)	(2.52)	(1.45)	(1.25)			
FIRE-TOTAL PRIVATE EQUITY (TIME WEIGHTED) - NET MGR			10.34	49.13	21.82	1.35	15.63	11.76	17.98	49.13	19.66	19.44			
NYC R3000 +3% LAGGED			7.12	67.21	23.72	(6.37)	18.42	6.00	21.06	67.21	20.59	20.09	17.30	14.37	
EXCESS RETURN			3.22	(18.08)	(1.90)	7.72	(2.79)	5.76	(3.08)	(18.08)	(0.93)	(0.66)	(1.58)	0.49	
264 FIRE-TOTAL PRIVATE REAL ESTATE (TIME WEIGHTED) - GROSS	801	4.22	4.10	10.19	8.02	3.14	1.16	7.58	10.88	10.19	7.16	8.89	11.28	8.17	04/01/2004
ESTIMATED INVESTMENT FEES			(0.32)	(0.91)	(0.52)	(0.60)	(0.55)	(0.70)	(0.45)	(0.91)	(0.67)	(0.62)			
FIRE-TOTAL PRIVATE EQUITY (TIME WEIGHTED) - NET MGR			3.78	9.28	7.49	2.54	0.61	6.88	10.43	9.28	6.49	8.27			
NCREIF NFI-ODCE NET + 100 BP			3.94	8.15	6.16	2.34	1.35	5.43	8.43	8.15	5.64	6.68	9.68		
EXCESS RETURN			(0.15)	1.13	1.33	0.20	(0.73)	1.45	2.00	1.13	0.85	1.60	1.60		
274 FIRE-TOTAL INFRASTRUCTURE (TIME WEIGHTED) - GROSS	194	1.02	4.07	20.25	9.39	7.48	9.64	13.79	10.05	20.25	13.65	15.22		15.42	12/01/2013
ESTIMATED INVESTMENT FEES			(0.69)	(1.85)	(1.07)	(1.79)	(1.47)	(1.61)	(1.46)	(1.85)	(1.72)	(2.09)		(2.94)	
FIRE-TOTAL PRIVATE EQUITY (TIME WEIGHTED) - NET MGR			3.38	18.40	8.32	5.69	8.17	12.18	8.59	18.40	11.93	13.12		12.48	
CPI + 4%			3.35	9.57	5.65	4.74	5.25	6.38	6.02	9.57	6.66	6.54		6.03	
EXCESS RETURN			0.03	8.84	2.67	0.95	2.91	5.80	2.57	8.84	5.27	6.58		6.45	

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	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE 2020	CYE 2020	CYE 2019	CYE 2018	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
FIXED INCOME RETURN DETAIL															
286 FIRE-TOTAL FIXED INCOME - GROSS	6,690	35.25	3.03	3.84	0.17	8.67	9.35	10.53	(0.38)	3.84	6.66	4.99	4.71	7.95	02/01/1980
ESTIMATED INVESTMENT FEES			(0.02)	(0.10)	(0.05)	(0.15)	(0.13)	(0.15)	(0.12)	(0.10)	(0.13)	(0.13)			
EST MANAGEMENT FEES			(0.02)	(0.10)	(0.05)	(0.15)	(0.13)	(0.15)	(0.12)	(0.10)	(0.13)	(0.13)			
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
FIRE-TOTAL FIXED INCOME - NET MGR			3.01	3.73	0.12	8.52	9.23	10.38	(0.50)	3.73	6.54	4.86			
294 FIRE-TOTAL FIXED INCOME (ex ALTERNATIVE CREDIT & CASH) - GROSS	4,855	25.58	3.01	(0.77)	(2.00)	13.23	11.48	10.59	(0.84)	(0.77)	6.78	4.24		4.31	11/01/2013
ESTIMATED INVESTMENT FEES			(0.01)	(0.04)	(0.02)	(0.09)	(0.07)	(0.09)	(0.08)	(0.04)	(0.07)	(0.07)		(0.09)	
EST MANAGEMENT FEES			(0.01)	(0.04)	(0.02)	(0.09)	(0.07)	(0.09)	(0.08)	(0.04)	(0.07)	(0.07)		(0.09)	
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
FIRE-TOTAL FIXED INCOME (ex ALTERNATIVE CREDIT & CASH) - NET MGR			3.00	(0.81)	(2.02)	13.14	11.42	10.51	(0.92)	(0.81)	6.71	4.16		4.22	
302 FIRE-TOTAL STRUCTURED FIXED INCOME - GROSS	3,829	20.17	2.98	(2.61)	(2.92)	15.74	12.81	11.18	(0.85)	(2.61)	7.32	4.45	4.66	7.55	01/01/1985
ESTIMATED INVESTMENT FEES			(0.01)	(0.03)	(0.01)	(0.05)	(0.05)	(0.04)	(0.04)	(0.03)	(0.04)	(0.05)			
FIRE-TOTAL STRUCTURED FIXED INCOME - NET MGR			2.97	(2.64)	(2.93)	15.69	12.76	11.13	(0.89)	(2.64)	7.28	4.41			
NYC CUSTOM STRUCTURED INDEX-FIRE			2.88	(2.72)	(2.80)	18.61	14.74	13.17	(1.29)	(2.72)	8.53	5.28	4.92		
EXCESS RETURN			0.09	0.08	(0.13)	(2.92)	(1.98)	(2.04)	0.40	0.08	(1.26)	(0.87)	(0.27)		
312 FIRE-TOTAL GOVERNMENT - GROSS	2,306	12.15	3.71	(6.19)	(4.44)	19.06	13.77	11.15	(1.02)	(6.19)	7.08	2.85	4.63	7.01	01/01/1987
ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.01)	(0.03)	(0.02)	(0.03)	(0.02)	(0.01)	(0.02)	(0.03)			
FIRE-TOTAL GOVERNMENT - NET MGR			3.71	(6.20)	(4.44)	19.03	13.75	11.12	(1.04)	(6.20)	7.06	2.82			
CUSTOM GOVERNMENT BENCHMARK - FIRE			3.73	(5.63)	(4.23)	25.33	19.35	14.89	(1.89)	(5.63)	9.90	5.24	5.88		
EXCESS RETURN			(0.03)	(0.57)	(0.21)	(6.30)	(5.60)	(3.78)	0.85	(0.57)	(2.85)	(2.42)	(1.25)		
322 FIRE-TOTAL MORTGAGE - GROSS	802	4.23	0.49	0.14	(0.63)	6.08	4.62	6.85	0.97	0.14	4.22	2.60	3.04	6.24	03/01/1987
ESTIMATED INVESTMENT FEES			(0.01)	(0.04)	(0.01)	(0.05)	(0.06)	(0.05)	(0.05)	(0.04)	(0.05)	(0.05)			
FIRE-TOTAL MORTGAGE - NET MGR			0.48	0.10	(0.64)	6.03	4.56	6.80	0.92	0.10	4.17	2.55			
NYC CUSTOM MORTGAGE BENCHMARK			0.33	(0.48)	(0.77)	5.96	3.91	6.68	1.01	(0.48)	3.91	2.33	2.67	5.91	
EXCESS RETURN			0.15	0.58	0.13	0.07	0.65	0.12	(0.09)	0.58	0.26	0.21	0.37	0.32	
332 FIRE-TOTAL INVESTMENT GRADE CORPORATE - GROSS	721	3.80	3.64	3.73	(1.12)	9.53	9.99	14.47	(2.22)	3.73	7.87	5.27	5.42	7.02	01/01/1987
ESTIMATED INVESTMENT FEES			(0.02)	(0.09)	(0.04)	(0.09)	(0.09)	(0.10)	(0.09)	(0.09)	(0.09)	(0.09)			
FIRE-TOTAL INVESTMENT GRADE CORPORATE - NET MGR			3.62	3.65	(1.16)	9.44	9.90	14.37	(2.30)	3.65	7.78	5.18			
NYC CUSTOM IGC BENCHMARK			3.55	3.34	(1.07)	9.26	9.70	13.40	(1.90)	3.34	7.53	4.70	4.90		
EXCESS RETURN			0.08	0.31	(0.09)	0.18	0.20	0.98	(0.40)	0.31	0.24	0.48	0.52		
342 FIRE-TOTAL CORE FI- DEVELOPING MGRS - GROSS	87	0.46	2.14	1.90	(0.97)	8.23	8.37	10.07	(1.01)	1.90	6.02	3.72	4.04	4.94	05/01/2009
ESTIMATED INVESTMENT FEES			(0.05)	(0.19)	(0.09)	(0.20)	(0.20)	(0.22)	(0.20)	(0.19)	(0.20)	(0.20)			
FIRE-TOTAL CORE FI- DEVELOPING MGRS - NET MGR			2.09	1.70	(1.06)	8.03	8.16	9.85	(1.21)	1.70	5.82	3.52			
BLOOMBERG U.S. AGGREGATE			1.83	(0.33)	(1.60)	8.74	7.51	8.72	0.01	(0.33)	5.34	3.03	3.39	3.99	
EXCESS RETURN			0.26	2.04	0.54	(0.71)	0.66	1.14	(1.22)	2.04	0.48	0.49	0.65	0.95	

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	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE 2020	CYE 2020	CYE 2019	CYE 2018	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
FIXED INCOME RETURN DETAIL															
364 FIRE-TOTAL TIPS - GROSS	819	4.32	3.41	6.45	1.70	8.34	11.03	8.46	(1.25)	6.45	6.53	4.19	3.49	4.27	06/01/2005
ESTIMATED INVESTMENT FEES			(0.00)	(0.02)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)			
FIRE-TOTAL TIPS - NET MGR			3.41	6.43	1.69	8.32	11.01	8.44	(1.27)	6.43	6.51	4.17			
BLOOMBERG GLOBAL INFL-LINKED: U.S. TIPS			3.25	6.51	1.73	8.28	10.99	8.43	(1.26)	6.51	6.53	4.17	3.40	4.16	
EXCESS RETURN			0.16	(0.08)	(0.04)	0.04	0.02	0.01	(0.01)	(0.08)	(0.02)	(0.01)	0.09	0.11	
384 FIRE-TOTAL TARGETED INVESTMENTS (NO CASH) - GROSS	120	0.63	1.94	0.68	(0.85)	8.14	7.10	9.05	0.93	0.68	5.83	3.43	3.91	7.08	12/01/1984
ESTIMATED INVESTMENT FEES			(0.05)	(0.21)	(0.10)	(0.23)	(0.22)	(0.25)	(0.28)	(0.21)	(0.24)	(0.26)	(0.31)	(0.18)	
FIRE-TOTAL TARGETED INVESTMENTS (NO CASH) - NET MGR			1.89	0.48	(0.94)	7.91	6.87	8.81	0.65	0.48	5.60	3.17	3.60	6.90	
FIRE CUSTOM BENCHMARK (NO CASH)			1.19	(0.18)	(1.13)	7.65	6.18	7.78	0.68	(0.18)	4.85	2.87	3.21		
EXCESS RETURN			0.69	0.66	0.18	0.26	0.69	1.03	(0.04)	0.66	0.75	0.30	0.39		

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	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE 2020	CYE 2020	CYE 2019	CYE 2018	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
ALTERNATIVE CREDIT INCOME RETURN DETAIL															
396 FIRE-TOTAL HIGH YIELD - GROSS	1,121	5.91	2.89	16.00	4.24	1.01	7.53	15.18	(2.94)	16.00	7.90	7.59	6.52	8.05	12/01/1994
ESTIMATED INVESTMENT FEES			(0.08)	(0.37)	(0.16)	(0.33)	(0.35)	(0.37)	(0.29)	(0.37)	(0.34)	(0.33)			
FIRE-TOTAL HIGH YIELD - NET MGR			2.81	15.63	4.07	0.68	7.18	14.81	(3.24)	15.63	7.55	7.25			
HIGH YIELD CUSTOM BENCHMARK			2.74	15.34	3.61	0.00	7.05	14.32	(2.34)	15.34	7.42	7.19	6.41	7.02	
EXCESS RETURN			0.08	0.29	0.46	0.68	0.13	0.49	(0.90)	0.29	0.13	0.06	0.11	1.03	
406 FIRE- TOTAL BANK LOANS - GROSS	5	0.02				(2.14)	0.55	7.73	1.18						12/01/2012
ESTIMATED INVESTMENT FEES						(0.36)	(0.36)	(0.39)	(0.36)						
FIRE-TOTAL BANK LOANS - NET MGR						(2.50)	0.19	7.34	0.81						
CSFB LEVERAGED LOAN INDEX						(2.27)	2.78	8.17	1.14						
EXCESS RETURN						(0.23)	(2.59)	(0.83)	(0.33)						
416 FIRE-TOTAL OPPORTUNISTIC FIXED INCOME - GROSS	594	3.13	4.90	22.09	10.91	(1.71)	5.52	5.84	6.54	22.09	8.25	9.02	6.96	8.56	11/01/2007
ESTIMATED INVESTMENT FEES			(0.03)	(0.23)	(0.13)	(0.17)	(0.16)	(0.18)	(0.16)	(0.23)	(0.18)	(0.17)			
FIRE-TOTAL OPPORTUNISTIC FIXED INCOME - NET MGR			4.87	21.86	10.78	(1.88)	5.36	5.66	6.38	21.86	8.07	8.85			
OPPORTUNISTIC FIXED INCOME JPMGHY / CSFB 50/50 BLEND PLUS 300			2.83	17.35	5.27	0.88	7.22	14.66	2.36	17.35	8.96	9.44	8.78	9.09	
EXCESS RETURN			2.04	4.51	5.52	(2.76)	(1.86)	(9.01)	4.02	4.51	(0.89)	(0.59)	(1.82)	(0.54)	
CASH SUMMARY															
428 Short Term FIRE - GROSS	114	0.60	0.03	0.12	0.05	1.38	0.45	2.27	1.97	0.12	1.28	1.22	0.81	3.36	12/01/1989
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		
Short Term FIRE - NET MGR			0.03	0.12	0.05	1.38	0.45	2.27	1.97	0.12	1.28	1.22	0.81		
432 Cash Account	0	0.00													
434 Securities Lending	0	0.00													
436 KKR Cash Account	0	0.00													

New York City
Fire Department Pension Fund, Subchapter Two

Appendix B

Public Markets Manager Performance Detail

Public Markets Manager Performance Detail

Net Returns Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
EQUITY SUMMARY										
US EQUITY										
PanAgora-US SCC	69	0.36	3.78	55.90	17.03					
RUSSELL 2000 (DAILY)			4.29	62.03	17.54					
Excess			(0.52)	(6.12)	(0.51)					
BlackRock US SCG R2000	0	0.00	3.91	51.45	9.30	34.42	28.39	(9.14)	22.26	11.29
RUSSELL 2000 GROWTH DAILY			3.92	51.36	8.98	34.63	28.48	(9.31)	22.17	11.32
Excess			(0.01)	0.09	0.32	(0.21)	(0.09)	0.17	0.09	(0.02)
BlackRock US SCV R2000	0	0.00	4.48	73.34	26.56	4.88	22.60	(12.79)	7.34	31.71
RUSSELL 2000 VALUE DAILY			4.56	73.28	26.69	4.63	22.39	(12.86)	7.84	31.74
Excess			(0.08)	0.06	(0.13)	0.24	0.20	0.08	(0.49)	(0.03)
Brown Asset Mgmt US SCG	95	0.50	3.33	21.73	(3.36)	45.05	29.45	1.06	28.87	10.25
RUSSELL 2000 GROWTH DAILY			3.92	51.36	8.98	34.63	28.48	(9.31)	22.17	11.32
Excess			(0.58)	(29.63)	(12.35)	10.42	0.97	10.37	6.70	(1.07)
Wasatch-US SCG	71	0.38	7.67	52.99	13.45	39.15				
RUSSELL 2000 GROWTH DAILY			3.92	51.36	8.98	34.63				
Excess			3.75	1.63	4.46	4.52				
Cooke and Bieler-US SCV	68	0.36	0.79	53.24	17.38	9.23				
RUSSELL 2000 VALUE DAILY			4.56	73.28	26.69	4.63				
Excess			(3.77)	(20.04)	(9.31)	4.60				
Pzena-US SCV	81	0.42	1.67	73.42	23.77	0.68				
RUSSELL 2000 VALUE DAILY			4.56	73.28	26.69	4.63				
Excess			(2.89)	0.14	(2.92)	(3.95)				

Public Markets Manager Performance Detail

Net Returns Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
Wellington US MCC	249	1.31	2.85	43.37	8.32	25.11	32.69	(7.35)	25.09	12.29
S&P 400 MIDCAP INDEX (DAILY)			3.64	53.24	17.59	13.66	26.20	(11.08)	16.24	20.74
Excess			(0.79)	(9.87)	(9.27)	11.45	6.49	3.74	8.84	(8.45)
BlackRock US LMC R1000 Core	2,878	15.16	8.51	43.35	15.13	21.32	31.40			
RUSSELL 1000 (DAILY)			8.54	43.07	14.95	20.96	31.43			
Excess			(0.03)	0.28	0.18	0.36	(0.02)			
PIMCO RAFI US LMCE	558	2.94	5.42	49.41	20.34	4.47	25.39	(6.74)	16.88	
RUSSELL 1000 (DAILY)			8.54	43.07	14.95	20.96	31.43	(4.78)	21.69	
Excess			(3.12)	6.34	5.39	(16.49)	(6.03)	(1.96)	(4.81)	
Legal General US LMCE	545	2.87	6.03	41.36	15.08	9.61				
RUSSELL 1000 (DAILY)			8.54	43.07	14.95	20.96				
Excess			(2.51)	(1.71)	0.12	(11.36)				
SSGA US LMC Top 200 Core	910	4.80	8.98	40.81	14.56	22.39	31.77			
RUSSELL TOP 200 INDEX (DAILY)			8.93	40.81	14.50	22.37	31.75			
Excess			0.05	(0.00)	0.06	0.02	0.02			
FUND OF FUNDS										
FIRE-TOTAL FUND OF FUNDS	32	0.17	4.54	66.90	21.35	19.28	23.33	(8.21)		
RUSSELL 2000 (DAILY)			4.29	62.03	17.54	19.96	25.52	(11.01)		
Excess			0.25	4.88	3.81	(0.68)	(2.20)	2.80		
FIRE-TOTAL LEGATO	32	0.17	4.54	66.90	21.35	19.28	23.33	(8.19)		
RUSSELL 2000 (DAILY)			4.29	62.03	17.54	19.96	25.52	(11.01)		
Excess			0.25	4.88	3.81	(0.68)	(2.20)	2.82		
NON - US EQUITY										
Baillie Gifford WorldxUS LMCC	396	2.09	7.32	45.85	3.96	66.93	37.00	(15.37)	44.17	0.70
NYC Developed Growth Benchmark ^[1]			5.65	33.60	9.92	7.59	22.49	(14.09)	27.77	(3.04)
Excess			1.68	12.24	(5.95)	59.34	14.50	(1.28)	16.40	3.74

Public Markets Manager Performance Detail

Net Returns Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
Walter Scott WorldxUS LMCC	359	1.89	7.80	29.21	6.78	17.99	28.51	(7.65)	28.12	5.03
NYC Developed Growth Benchmark ^[1]			5.65	33.60	9.92	7.59	22.49	(14.09)	27.77	(3.04)
Excess			2.15	(4.39)	(3.14)	10.41	6.02	6.44	0.35	8.07
Causeway WorldxUS LMCV	251	1.32	2.08	41.67	9.43	6.48	21.35	(18.34)	28.22	0.52
NYC Developed Value Benchmark ^[2]			5.65	33.60	9.92	7.59	22.49	(14.09)	22.77	5.02
Excess			(3.57)	8.07	(0.48)	(1.10)	(1.14)	(4.25)	5.45	(4.51)
Sprucegrove WorldxUS LMCC	297	1.56	3.97	44.94	10.49	4.85	17.62	(13.67)	27.20	11.10
NYC Developed Value Benchmark ^[2]			5.65	33.60	9.92	7.59	22.49	(14.09)	22.77	5.02
Excess			(1.67)	11.34	0.57	(2.74)	(4.87)	0.42	4.44	6.08
Acadian WorldxUS SCC	137	0.72	9.37	53.37	19.18	15.89	21.82	(19.22)	38.38	6.41
S&P EPAC Small Cap USD NET			5.31	42.23	9.16	13.78	23.71	(18.58)	33.47	1.34
Excess			4.06	11.14	10.02	2.11	(1.89)	(0.65)	4.91	5.07
Fidelity WorldxUS SCC	0	0.00						(18.22)	31.28	(0.80)
S&P EPAC Small Cap USD NET								(18.58)	33.47	1.34
Excess								0.36	(2.19)	(2.14)
Algert EAFE SCC	26	0.13	3.97	40.24	11.21	9.70				
MSCI EAFE SMALL CAP NET (DAILY)			4.34	40.98	9.04	12.34				
Excess			(0.37)	(0.74)	2.17	(2.64)				
SSGA WorldxUS LMC NYC Custom IDX	187	0.99	5.77	34.01	10.07	8.09	22.75	(13.64)	24.43	1.28
NYC Custom World ex US Index ^[3]			5.65	33.60	9.92	7.59	22.49	(14.09)	24.12	1.00
Excess			0.13	0.40	0.15	0.50	0.26	0.45	0.32	0.28
SSGA WorldxUS SC Custom IDX ^[4]	101	0.53	4.90	42.47	10.03	13.16	25.67	(17.97)	33.43	2.77
World ex USA SC PASSIVE CUSTOM BM ^[5]			4.81	42.28	9.92	12.78	25.41	(18.07)	33.31	2.18
Excess			0.09	0.19	0.11	0.38	0.26	0.10	0.12	0.59

Public Markets Manager Performance Detail

Net Returns Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
EMERGING MARKETS										
Baillie Gifford EM	246	1.29	5.30	50.42	5.83	29.60	28.50	(15.37)	54.13	2.78
MSCI EMERGING MARKETS			5.05	40.90	7.45	18.31	18.42	(14.57)	37.28	11.19
Excess			0.25	9.52	(1.62)	11.29	10.08	(0.80)	16.85	(8.41)
Acadian EM	181	0.95	4.49	41.16	11.63	10.72	15.71	(17.27)	40.45	12.65
MSCI EMERGING MARKETS			5.05	40.90	7.45	18.31	18.42	(14.57)	37.28	11.19
Excess			(0.56)	0.26	4.18	(7.59)	(2.71)	(2.70)	3.16	1.46
Parametric EM	0	0.00					14.20	(14.33)	29.65	13.85
MSCI EMERGING MARKETS							18.42	(14.57)	37.28	11.19
Excess							(4.22)	0.24	(7.63)	2.67
Pzena-EM ACV	287	1.51	3.02	54.61	14.48					
MSCI EMERGING MARKETS			5.05	40.90	7.45					
Excess			(2.03)	13.71	7.03					
Sands-EM LCG	163	0.86	9.22		6.86					
MSCI EMERGING MARKETS			5.05		7.45					
Excess			4.17		(0.58)					
UBS-EM ACC	173	0.91	2.21	38.17	3.21					
MSCI EMERGING MARKETS			5.05	40.90	7.45					
Excess			(2.84)	(2.73)	(4.24)					
BlackRock MSCI EM Core	224	1.18	4.90	40.66	7.76	17.27	18.76	(14.43)	37.25	11.17
MSCI EMERGING MARKETS			5.05	40.90	7.45	18.31	18.42	(14.57)	37.28	11.19
Excess			(0.14)	(0.24)	0.31	(1.04)	0.34	0.14	(0.03)	(0.02)
INTERNATIONAL FOF										
FIRE-TOTAL INTERNATIONAL FOF	100	0.53	8.21	40.05	9.83	16.62	22.15	(14.65)		
MSCI ACWI ex USA IMI Net			5.60	37.18	9.58	11.12	21.63	(14.76)		
Excess			2.62	2.87	0.26	5.50	0.52	0.10		

Public Markets Manager Performance Detail

Net Returns Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
FIRE-TOTAL INTERNATIONAL XPONANCE	100	0.53	8.21	40.05	9.83	16.62	22.15	(14.65)		
MSCI ACWI ex USA IMI Net			5.60	37.18	9.58	11.12	21.63	(14.76)		
Excess			2.62	2.87	0.26	5.50	0.52	0.10		
GLOBAL EQUITY										
Fiera-Global	168	0.89	10.55	41.82	13.24	20.63	34.02			
MSCI World Index			7.74	39.04	13.05	15.90	27.67			
Excess			2.81	2.78	0.19	4.72	6.35			
Morgan Stanley-Global	193	1.02	7.41	42.97	6.01	58.64	38.01			
MSCI AC WORLD (Daily Const)			7.39	39.26	12.30	16.25	26.60			
Excess			0.02	3.70	(6.29)	42.39	11.41			
REAL ESTATE SECURITIES										
Morgan Stanley REITS	0	0.00					19.02	(7.88)	9.26	3.49
Morgan Stanley Custom RESI Index							23.10	(4.22)	8.64	2.37
Excess							(4.08)	(3.66)	0.63	1.13
FIXED INCOME SUMMARY										
STRUCTURED FIXED INCOME										
Taplin Corporate	0	0.00				10.78	15.61	(3.48)	8.08	9.52
NYC - Investment Grade Credit						9.70	13.40	(1.90)	6.04	5.56
Excess						1.08	2.22	(1.58)	2.05	3.97
T Rowe Price-Corporate	289	1.52	3.61	3.82	(1.01)	9.60	14.52	(2.41)	6.89	6.00
NYC Custom IGC Benchmark ^(a)			3.55	3.34	(1.07)	9.70	13.40	(1.90)	6.04	5.56
Excess			0.07	0.48	0.06	(0.10)	1.12	(0.51)	0.86	0.44
BlackRock Corporate	172	0.91	3.73	3.42	(1.21)	10.28	14.05	(2.01)	6.12	5.43
NYC Custom IGC Benchmark ^(a)			3.55	3.34	(1.07)	9.70	13.40	(1.90)	6.04	5.56
Excess			0.19	0.08	(0.13)	0.58	0.66	(0.11)	0.09	(0.13)

Public Markets Manager Performance Detail

Net Returns Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
Neuberger Berman-Corporate	173	0.91	3.57							
Bloomberg U.S. Corporate Inv Grade			3.55							
Excess			0.02							
Prudential Corporate	86	0.45	3.53	3.80	(1.04)	9.88	13.71	(1.81)	6.32	5.97
NYC - Investment Grade Credit			3.39	3.28	(1.13)	9.70	13.40	(1.90)	6.04	5.56
Excess			0.14	0.51	0.09	0.18	0.31	0.09	0.28	0.41
BlackRock Mortgages	573	3.02	0.49	0.13	(0.71)	4.81	7.04	0.97	2.66	2.19
NYC Custom Mortgage Benchmark ^[7]			0.33	(0.48)	(0.77)	3.91	6.68	1.01	2.47	1.59
Excess			0.16	0.61	0.06	0.90	0.36	(0.04)	0.19	0.60
Neuberger Berman Mortgages	0	0.00					6.32	0.81	2.42	1.52
FTSE MORTGAGE INDEX							6.68	1.01	2.47	1.59
Excess							(0.35)	(0.20)	(0.05)	(0.06)
Wellington Mortgages	229	1.21	0.46		(0.47)					
Bloomberg US Mortgage Backed Securities			0.33		(0.77)					
Excess			0.13		0.30					
SSGA LI Treasury	85	0.45	4.06	(6.24)	(4.86)	14.04	10.67	(0.20)	4.81	1.47
NYC - Treasury Agency Plus Five			4.17	(6.52)	(5.04)	12.85	10.40	(0.05)	4.66	1.21
Excess			(0.10)	0.28	0.18	1.18	0.27	(0.15)	0.16	0.26
SSGA IT Treasury 1-10Y ^[8]	7	0.04	0.63	(1.15)	(1.14)	5.74	5.08	2.03		
FTSE USBIG Treasury/Agency 1-10 y			0.68	(1.09)	(1.06)	5.72	5.18	1.42		
Excess			(0.05)	(0.06)	(0.07)	0.03	(0.09)	0.61		
SSGA ST Treasury 1-3Y ^[9]	1,024	5.39	(0.05)	0.07	(0.10)	2.31	3.56	1.53	1.78	
FTSE USBIG Treasury 1-3 Y Index			(0.03)	0.07	(0.08)	3.09	3.56	1.56	0.42	
Excess			(0.02)	0.00	(0.03)	(0.78)	0.00	(0.03)	1.36	

Public Markets Manager Performance Detail

Net Returns Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
SSGA LT Treasury 10Y Plus	1,190	6.27	6.92	(10.60)	(7.82)	17.57	14.88	(1.83)	8.54	
FTSE Treasury 10+			6.98	(10.50)	(7.83)	17.72	14.89	(1.89)	8.60	
Excess			(0.06)	(0.10)	0.01	(0.16)	(0.01)	0.05	(0.07)	
HIGH YIELD										
Brigade High Yield	148	0.78	3.00	21.29	6.29	8.08	15.07			
Bloomberg U.S. HY - 2% Issuer Cap			2.74	15.34	3.61	7.05	14.32			
Excess			0.27	5.95	2.68	1.04	0.75			
Eaton Vance High Yield	168	0.88	2.84	14.24	3.44	5.62	14.66			
Bloomberg U.S. HY - 2% Issuer Cap			2.74	15.34	3.61	7.05	14.32			
Excess			0.10	(1.10)	(0.17)	(1.43)	0.35			
Mackay Shields High Yield	166	0.88	2.64	13.89	3.72	8.00	13.87			
Bloomberg U.S. HY - 2% Issuer Cap			2.74	15.34	3.61	7.05	14.32			
Excess			(0.09)	(1.45)	0.11	0.95	(0.45)			
Nomura High Yield	144	0.76	3.14	18.86	4.91	7.99	12.74			
Bloomberg U.S. HY - 2% Issuer Cap			2.74	15.34	3.61	7.05	14.32			
Excess			0.40	3.53	1.29	0.94	(1.58)			
Shenkman High Yield	179	0.94	2.59	13.34	3.09	6.68	14.10			
Bloomberg U.S. HY - 2% Issuer Cap			2.74	15.34	3.61	7.05	14.32			
Excess			(0.15)	(2.00)	(0.52)	(0.37)	(0.22)			
T Rowe Price High Yield	316	1.66	2.77	15.94	4.16	7.22	15.65	(2.34)	7.29	12.24
Bloomberg U.S. HY - 2% Issuer Cap			2.74	15.34	3.61	7.05	14.32	(2.08)	7.50	17.13
Excess			0.04	0.60	0.54	0.17	1.33	(0.26)	(0.22)	(4.89)
BANK LOANS										
Barings Bank Loans	0	0.00				1.12	7.82	0.38	4.47	8.46
CSFB LEVERAGED LOAN INDEX						2.78	8.17	1.14	4.25	9.88
Excess						(1.66)	(0.36)	(0.76)	0.22	(1.41)

Public Markets Manager Performance Detail

Net Returns Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
Bain Bank Loans	4	0.02								
CSFB LEVERAGED LOAN INDEX										
Excess										
TIPS										
BlackRock TIPS	182	0.96	3.38	6.32	1.63	11.01	8.42	(1.18)	2.98	4.75
Bloomberg Global Infl-Linked: U.S. TIPS			3.25	6.51	1.73	10.99	8.43	(1.26)	3.01	4.68
Excess			0.13	(0.20)	(0.10)	0.02	(0.01)	0.08	(0.02)	0.07
SSGA TIPS	637	3.36	3.42	6.47	1.71	10.96	8.44	(1.30)	3.06	4.59
Bloomberg Global Infl-Linked: U.S. TIPS			3.25	6.51	1.73	10.99	8.43	(1.26)	3.01	4.68
Excess			0.17	(0.05)	(0.02)	(0.03)	0.02	(0.04)	0.05	(0.09)
CORE FI-DEVELOPING MANAGERS										
LM Capital-Core Plus	33	0.18	1.95	1.97	(1.09)	9.09	9.55	(1.30)	3.92	3.43
Bloomberg U.S. Aggregate			1.83	(0.33)	(1.60)	7.51	8.72	0.01	3.54	2.65
Excess			0.12	2.31	0.51	1.58	0.84	(1.32)	0.38	0.78
Pugh-CorePlus	16	0.08	2.10	0.26	(1.30)					
Bloomberg U.S. Aggregate			1.83	(0.33)	(1.60)					
Excess			0.27	0.59	0.30					
GIA-Core Plus	37	0.20	2.21	2.09	(0.93)	7.87	10.17	(1.11)	3.99	3.96
Bloomberg U.S. Aggregate			1.83	(0.33)	(1.60)	7.51	8.72	0.01	3.54	2.65
Excess			0.38	2.43	0.67	0.37	1.46	(1.12)	0.45	1.31
ECONOMICALLY TARGETED INVESTMENTS										
AFL-CIO Housing Investment Trust	63	0.33	1.54	0.12	(0.74)	6.20	7.78	0.16	3.17	1.94
Bloomberg U.S. Aggregate			1.83	(0.33)	(1.60)	7.51	8.72	0.01	3.54	2.65
Excess			(0.29)	0.45	0.87	(1.31)	(0.94)	0.15	(0.38)	(0.71)

Public Markets Manager Performance Detail

Net Returns Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
RBC Access MBS	29	0.15	1.46	0.08	(0.82)	6.14	7.21	0.49	2.64	1.61
Access RBC Benchmark			0.44	(0.76)	(0.99)	4.69	6.05	1.17	1.96	1.52
Excess			1.02	0.84	0.17	1.45	1.16	(0.69)	0.69	0.09
CPC Construction Facility	3	0.02	0.77	2.64	2.26	0.67	6.42	4.14	6.06	(3.95)
CPC CONST BENCHMARK			0.60	2.45	1.21	2.73	4.09	3.99	3.34	3.03
Excess			0.17	0.20	1.06	(2.06)	2.33	0.15	2.73	(6.99)
BOA PPAR FNMA	3	0.02	3.35	(1.21)	(2.31)	6.12	13.54	2.33	5.21	4.07
FNMA Plus 85bps			0.62	0.51	(0.43)	5.14	7.80	1.86	3.61	2.38
Excess			2.72	(1.72)	(1.89)	0.98	5.74	0.47	1.60	1.69
Citibank PPAR FNMA	4	0.02	3.57	(0.97)	(2.20)	7.06	19.71	2.63	5.26	3.71
FNMA Plus 85bps			0.62	0.51	(0.43)	5.14	7.80	1.86	3.61	2.38
Excess			2.94	(1.48)	(1.77)	1.92	11.91	0.77	1.65	1.33
Citibank PPAR GNMA	1	0.00	1.53	2.05	(0.24)	8.31	5.33	1.90	3.10	2.78
GNMA Plus 65bps			0.12	(0.14)	(0.66)	4.31	6.73	1.63	2.53	2.28
Excess			1.42	2.19	0.42	4.00	(1.41)	0.27	0.57	0.50
CFSB PPAR FNMA	0	0.00	4.06		(2.71)					
FNMA Plus 85bps			0.62		(0.43)					
Excess			3.43		(2.28)					
CFSB PPAR GNMA	0	0.00	1.35	2.07	(0.17)	8.01	5.91	0.99	3.83	3.21
GNMA Plus 65bps			0.12	(0.14)	(0.66)	4.31	6.73	1.63	2.53	2.28
Excess			1.24	2.22	0.48	3.69	(0.82)	(0.65)	1.30	0.93
CPC PPAR FNMA	2	0.01	3.87	1.54	(0.63)	7.00	13.18	2.31	5.06	6.15
FNMA Plus 85bps			0.62	0.51	(0.43)	5.14	7.80	1.86	3.61	2.38
Excess			3.25	1.03	(0.20)	1.87	5.38	0.45	1.45	3.77

Public Markets Manager Performance Detail

Net Returns Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
ECLF PPAR FNMA	2	0.01	4.07	(0.03)	(2.48)					
FNMA Plus 85bps			0.62	0.51	(0.43)					
Excess			3.45	(0.55)	(2.05)					
JPMC PPAR FNMA	7	0.03	3.40	(0.50)	(2.35)	8.33	14.68	1.68	9.96	7.94
FNMA Plus 85bps			0.62	0.51	(0.43)	5.14	7.80	1.86	3.61	2.38
Excess			2.77	(1.02)	(1.93)	3.19	6.88	(0.18)	6.35	5.56
LIIF PPAR FNMA	3	0.02	3.38	(1.01)	(2.31)	6.44	16.35	2.27	9.55	5.03
FNMA Plus 85bps			0.62	0.51	(0.43)	5.14	7.80	1.86	3.61	2.38
Excess			2.76	(1.52)	(1.88)	1.30	8.55	0.41	5.94	2.65
LIIF PPAR GNMA	0	0.00	0.96	2.04	0.42	6.19	5.54	2.53	2.52	3.88
GNMA Plus 65bps			0.12	(0.14)	(0.66)	4.31	6.73	1.63	2.53	2.28
Excess			0.85	2.18	1.08	1.87	(1.19)	0.89	(0.01)	1.61
LISC PPAR FNMA	2	0.01	4.09	17.94	(2.45)	31.93	14.95			
FNMA Plus 85bps			0.62	0.51	(0.43)	5.14	7.80			
Excess			3.46	17.42	(2.02)	26.80	7.15			
NCBCI PPAR FNMA	0	0.00	1.21	2.86	0.37	8.49	4.08	2.00	1.75	3.46
FNMA Plus 85bps			0.62	0.51	(0.43)	5.14	7.80	1.86	3.61	2.38
Excess			0.59	2.35	0.80	3.36	(3.72)	0.15	(1.86)	1.07
NCBCI PPAR GNMA	0	0.00	1.11	3.07	0.64	8.16	3.69	1.23	3.01	3.51
GNMA Plus 65bps			0.12	(0.14)	(0.66)	4.31	6.73	1.63	2.53	2.28
Excess			0.99	3.21	1.29	3.85	(3.04)	(0.41)	0.48	1.23
Wells Fargo PPAR FNMA	1	0.01	3.93	19.77	(2.60)	28.61	21.71			
FNMA Plus 85bps			0.62	0.51	(0.43)	5.14	7.80			
Excess			3.31	19.25	(2.18)	23.48	13.91			

Public Markets Manager Performance Detail



Net Returns Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
CASH										
Short Term FIRE	114	0.60	0.03	0.12	0.05	0.45	2.27	1.97	1.13	0.88
ICE BofA US 3-Month Treasury Bill			(0.00)	0.09	0.02	0.67	2.28	1.87	0.86	0.33
Excess			0.03	0.03	0.03	(0.21)	(0.01)	0.09	0.27	0.56
Cash Account	0	0.00								
Securities Lending	0	0.00								

New York City
Fire Department Pension Fund, Subchapter Two

Appendix C

Alternative Assets Manager Performance Detail

Alternative Assets Manager Performance Detail

Through March 31, 2021

	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
TOTAL PRIVATE EQUITY		2,624,252,684	2,101,625,371	2,110,687,121	1,278,927,728	1.61	12.3%
TOTAL LIQUIDATED		219,044,522	242,421,289	312,576,713	19,993	1.29	7.0%
TOTAL ACTIVE		2,405,208,162	1,859,204,083	1,798,110,409	1,278,907,735	1.66	13.5%
TOTAL ACTIVE							
Cypress Merchant Banking Partners II, L.P.	1999	22,586,486	26,972,134	25,292,077	11,183	0.94	-1.2%
Lincolnshire Equity Fund II, L.P.	1999	6,899,005	7,223,050	14,158,254	126,110	1.98	24.6%
SCP Private Equity Partners II, L.P.	2000	15,000,000	16,834,296	6,514,303	971,784	0.44	-9.4%
Apollo Investment Fund V, L.P.	2001	15,000,000	23,379,009	46,122,367	128,930	1.98	38.8%
CVC European Equity Partners III, L.P.	2001	10,000,000	11,880,366	29,775,858	641,580	2.56	41.0%
Ares Corporate Opportunities Fund, L.P.	2003	5,000,000	5,998,308	8,941,880	51,995	1.50	13.1%
Blackstone Capital Partners IV, L.P.	2003	13,875,989	17,172,972	41,853,940	343,134	2.46	36.3%
FS Equity Partners V, L.P.	2003	10,000,000	8,567,981	16,744,589	906,426	2.06	15.4%
FdG Capital Partners II LP	2004	5,000,000	5,387,768	6,421,816	98,649	1.21	3.6%
Lincolnshire Equity Fund III, L.P.	2004	5,000,000	5,000,631	7,113,293	1,646,766	1.75	27.6%
Markstone Capital Partners, LP	2004	5,000,000	5,862,384	2,477,825	34,027	0.43	-34.5%
Medica III Investments (International) L.P.	2004	3,000,000	2,992,836	1,267,948	585,000	0.62	-8.3%
New York/Fairview Emerging Managers Fund, L.P.-Tranche 1	2004	2,000,000	2,053,879	2,119,833	146,591	1.10	1.6%
Yucaipa American Alliance Fund I, LP	2004	5,000,000	7,491,869	8,800,690	45,739	1.18	4.0%
Arlington Capital Partners II, L.P.	2005	4,000,000	4,069,527	7,137,350	7,174	1.76	11.2%
FirstMark Capital I, L.P. (fka FirstMark IV)	2005	1,500,000	1,639,064	9,476,836	6,156,399	9.54	34.2%
JP Morgan Fleming (Tranche A)	2005	3,000,000	3,023,398	3,313,231	779,903	1.35	5.3%
New Mountain Partners II, L.P.	2005	2,580,650	2,337,304	4,502,540	27,305	1.94	13.6%
Palladium Equity Partners III, L.P.	2005	10,000,000	10,572,813	20,070,680	74,765	1.91	15.4%
Snow Phipps Group, L.P.	2005	5,000,000	6,124,792	5,228,654	2,325,014	1.23	4.4%
USPF II Institutional Fund, L.P.	2005	5,000,000	6,594,940	7,688,280	592,686	1.26	3.8%
Aisling Capital II, LP	2006	1,000,000	1,178,021	1,141,279	32,044	1.00	-0.1%
Apollo Investment Fund VI, L.P.	2006	20,000,000	25,741,832	38,519,613	379,065	1.51	8.7%
Ares Corporate Opportunities Fund II, L.P.	2006	5,000,000	5,476,087	9,138,855	6,426	1.67	13.1%
Arsenal Capital Partners II, LP	2006	4,000,000	4,986,154	9,557,955	40,104	1.92	12.1%
Atlantic Equity Partners IV, L.P.	2006	3,768,757	3,663,425	719,154	3,875,719	1.25	2.2%
Blackstone Capital Partners V, L.P.	2006	9,448,250	10,060,754	16,240,726	256,620	1.64	8.0%
Catterton Partners VI, L.P.	2006	5,000,000	5,693,763	9,218,897	1,608,111	1.90	11.5%

Information provided by the New York City Fire Retirement System Consultants

Alternative Assets Manager Performance Detail

Through March 31, 2021

	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
Coller International Partners V, L.P.	2006	5,000,000	4,372,182	5,832,594	178,983	1.37	7.6%
Euro Choice III L.P.	2006	5,313,432	5,347,612	6,025,938	179,016	1.16	2.9%
Falconhead Capital Partners II, L.P.	2006	4,000,000	4,481,396	4,478,251	909,946	1.20	3.3%
First Reserve Fund XI, L.P.	2006	5,000,000	5,313,265	3,462,114	53,018	0.66	-9.5%
GF Capital Private Equity Fund, L.P.	2006	3,000,000	3,076,007	4,058,641	1,362,039	1.76	11.2%
MidOcean Partners III, L.P.	2006	9,705,796	11,617,278	23,524,659	1,588,939	2.16	13.3%
Permira IV, L.P.	2006	5,491,709	6,016,234	8,822,843	902,928	1.62	8.9%
RRE Ventures IV, L.P.	2006	2,500,000	3,180,708	2,544,869	4,503,753	2.22	9.5%
Terra Firma Capital Partners III, L.P.	2006	5,223,559	5,298,700	2,388,640	20,712	0.45	-9.3%
The Fourth Cinven Fund	2006	2,725,297	2,870,280	4,124,333	1,921	1.44	7.3%
Thomas, McNerney & Partners II, L.P.	2006	3,000,000	3,035,394	6,611,246	259,533	2.26	16.6%
Carlyle Partners V, L.P.	2007	10,000,000	10,340,844	17,369,896	1,197,268	1.80	13.6%
Constellation Venture Capital III, L.P.	2007	5,000,000	5,765,313	2,904,086	2,100,709	0.87	-2.0%
FTVentures III, LP	2007	2,500,000	2,743,841	5,452,899	760,863	2.26	15.6%
Gleacher Mezzanine Fund II, L.P.	2007	3,000,000	2,752,429	3,651,296	35,083	1.34	10.6%
GSO Capital Opportunities Fund LP	2007	7,500,000	11,229,550	15,937,873	111,060	1.43	17.3%
Highland Consumer Fund I LP	2007	2,000,000	2,003,212	1,224,131	328,998	0.78	-3.3%
Montreux Equity Partners IV, L.P.	2007	5,000,000	5,000,000	2,761,158	4,080,948	1.37	4.2%
New Mountain Partners III, L.P.	2007	10,000,000	10,228,555	17,524,219	7,450,712	2.44	14.7%
Olympus Capital Asia III, L.P.	2007	5,000,000	5,851,116	3,005,408	842,762	0.66	-9.2%
PCG Clean Energy & Technology Fund (East), LLC	2007	10,000,000	9,047,736	2,660,473	824,372	0.39	-12.0%
Pegasus Partners IV, L.P.	2007	7,500,000	9,112,510	6,900,231	1,453,705	0.92	-1.6%
Pine Brook Capital Partners, L.P.	2007	7,500,000	8,517,075	10,609,787	457,588	1.30	7.0%
Post Capital Equity Partners II LP	2007	3,000,000	2,163,355	4,081,000	483,666	2.11	15.2%
Princeton Capital Corp. (fka Capital Point)	2007	3,000,000	3,497,432	2,267,271	781,978	0.87	-2.8%
SCP Vitalife Partners II Fund	2007	5,000,000	5,024,924	395	1,296,984	0.26	-12.9%
Trilantic Capital Partners IV L.P.	2007	7,236,332	7,554,273	11,334,907	392,854	1.55	13.1%
United States Power Fund III, L.P.	2007	5,000,000	5,915,665	6,111,963	1,324,852	1.26	3.9%
Vista Equity Partners Fund III, L.P.	2007	7,500,000	8,064,983	19,154,991	622,088	2.45	26.8%
Aisling Capital III, LP	2008	3,500,000	3,948,349	9,303,691	37,395	2.37	26.0%
Apollo Investment Fund VII, L.P.	2008	25,000,000	30,668,979	50,545,274	1,924,015	1.71	22.5%
Ares Corporate Opportunities Fund III, L.P.	2008	10,000,000	12,252,779	25,914,676	708,886	2.17	20.5%
Avista Capital Partners II, L.P.	2008	10,000,000	13,150,800	20,608,240	777,833	1.63	14.4%

Information provided by the New York City Fire Retirement System Consultants

Alternative Assets Manager Performance Detail

Through March 31, 2021

	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
Blue Wolf Capital Fund II, L.P.	2008	3,000,000	3,317,104	5,475,256	65,083	1.67	10.6%
Bridgepoint Europe IV	2008	6,657,724	6,871,685	9,131,924	1,190,001	1.50	9.5%
Crestview Partners II, L.P.	2008	7,500,000	8,938,561	12,338,084	4,343,322	1.87	14.1%
CVC European Equity Partners V, L.P.	2008	13,654,378	14,796,154	28,531,266	591,319	1.97	16.4%
Euro Choice IV L.P.	2008	6,475,312	6,023,874	6,882,389	1,756,900	1.43	6.9%
First Reserve Fund XII, L.P.	2008	5,000,000	5,554,103	2,817,426	280,327	0.56	-14.2%
GCM Grosvenor NYCFDPF Emerging Manager Fund, L.P.	2008	8,979,798	11,822,110	11,205,129	5,437,066	1.41	8.9%
GI Partners Fund III L.P.	2008	7,500,000	8,086,843	12,702,734	20,108	1.57	13.0%
Landmark Equity Partners XIV, L.P.	2008	13,630,000	13,292,742	15,530,814	2,242,001	1.34	9.6%
Levine Leichtman Capital Partners IV, L.P.	2008	5,000,000	5,353,601	8,479,347	704,924	1.72	18.3%
Milestone Partners III, L.P.	2008	3,000,000	3,237,896	2,791,270	213,092	0.93	-1.4%
New York/Fairview Emerging Managers Fund, L.P.-Tranche 2	2008	5,000,000	5,065,974	9,845,112	4,988,187	2.93	19.7%
NGN BioMed Opportunity II, L.P.	2008	5,000,000	4,787,955	3,336,553	2,353,614	1.19	2.4%
Onex Partners III LP	2008	5,000,000	5,484,081	7,508,754	1,359,961	1.62	11.4%
Paladin III (NY City), L.P.	2008	7,500,000	10,444,540	18,210,368	9,660,625	2.67	15.5%
Riverstone/Carlyle Global Energy & Power Fund IV, L.P.	2008	7,500,000	8,636,195	8,871,839	409,646	1.07	1.9%
Yucaipa American Alliance Fund II, LP	2008	15,000,000	20,587,385	21,693,382	12,794,694	1.68	8.6%
Yucaipa Corporate Initiatives Fund II, LP	2008	4,676,976	4,592,705	2,742,407	1,257,539	0.87	-1.9%
FS Equity Partners VI, L.P.	2009	12,500,000	12,597,736	34,682,785	4,927,943	3.14	23.8%
Lexington Capital Partners VII, L.P.	2009	10,000,000	8,923,109	12,316,139	2,187,335	1.63	14.0%
Lincolnshire Equity Fund IV, L.P.	2009	2,500,000	2,692,772	3,103,753	821,965	1.46	8.8%
NorthBound Emerging Manager Custom Fund LP	2009	5,000,000	4,366,772	6,146,330	876,342	1.61	12.0%
Scale Venture Partners III, LP	2009	5,000,000	4,981,767	12,750,882	1,173,653	2.80	22.7%
Welsh, Carson, Anderson & Stowe XI, L.P.	2009	7,500,000	7,500,000	10,303,259	2,069,101	1.65	11.7%
Comvest Investment Partners IV, L.P.	2010	20,000,000	20,837,763	33,191,367	4,513,280	1.81	28.5%
Snow Phipps II, L.P.	2010	7,500,000	9,040,913	8,154,530	4,169,404	1.36	8.3%
Trident V, L.P.	2010	15,000,000	17,584,418	20,978,448	9,829,859	1.75	11.6%
American Securities Partners VI, L.P.	2011	20,000,000	22,194,553	33,319,909	15,029,239	2.18	22.6%
Ampersand 2011	2011	5,000,000	5,000,000	16,193,623	136,374	3.27	21.9%
AXA Secondary Fund V B L.P.	2011	40,000,000	32,956,743	52,565,618	258,827	1.60	15.4%
BC European Capital IX	2011	21,816,135	24,710,443	24,449,952	26,360,323	2.06	16.6%
BDCM Opportunity Fund III, L.P.	2011	10,000,000	14,702,051	9,638,954	12,023,971	1.47	8.3%
Blackstone Capital Partners VI, L.P.	2011	10,000,000	10,701,032	11,628,390	6,690,744	1.71	12.7%

Information provided by the New York City Fire Retirement System Consultants

Alternative Assets Manager Performance Detail

Through March 31, 2021

	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
EQT VI, L.P.	2011	17,680,087	18,897,186	26,829,718	5,403,865	1.71	13.4%
Pegasus Partners V, L.P.	2011	6,236,975	7,858,593	6,767,956	5,089,523	1.51	9.6%
Platinum Equity Capital Partners III, L.P.	2011	25,000,000	21,418,242	40,077,538	7,038,274	2.20	36.9%
Vista Equity Partners Fund IV, L.P.	2011	30,000,000	31,042,084	39,499,194	19,764,501	1.91	15.7%
Wellspring Capital Partners V, L.P.	2011	7,500,000	7,904,533	10,712,066	2,456,180	1.67	15.7%
Ares Corporate Opportunities Fund IV, L.P.	2012	20,000,000	21,309,421	26,607,874	12,890,063	1.85	15.7%
Green Equity Investors VI, L.P.	2012	25,000,000	27,485,315	20,720,869	30,829,696	1.88	15.2%
<i>NYCFPF - 2012 Emerging Manager Program</i>	<i>2012</i>	<i>22,700,000</i>	<i>23,689,891</i>	<i>19,634,278</i>	<i>31,457,175</i>	<i>2.16</i>	<i>20.4%</i>
Palladium Equity Partners IV, L.P.	2012	10,000,000	9,836,601	4,888,221	8,766,693	1.39	9.1%
Summit Partners Growth Equity Fund VIII-A, L.P.	2012	30,000,000	34,309,073	62,934,055	20,250,209	2.42	27.6%
Trilantic Capital Partners V L.P.	2012	10,000,000	11,072,685	11,288,619	6,047,400	1.57	16.0%
Warburg Pincus Private Equity XI, L.P.	2012	35,000,000	36,922,958	42,168,696	20,838,825	1.71	13.2%
Apollo Investment Fund VIII, L.P.	2013	40,000,000	37,846,567	23,406,352	34,817,905	1.54	12.5%
ASF VI B L.P.	2013	30,000,000	24,228,369	30,330,387	4,584,945	1.44	12.3%
Carlyle Partners VI, L.P.	2013	20,000,000	21,451,915	13,208,725	26,129,830	1.83	16.6%
Crestview Partners III, L.P.	2013	24,000,000	19,458,088	10,718,817	17,499,727	1.45	13.7%
Landmark - NYC Fund I, L.P.	2013	9,000,000	8,202,166	6,938,907	6,335,184	1.62	16.1%
Landmark Equity Partners XV, L.P.	2013	26,000,000	20,871,107	16,080,118	12,965,526	1.39	13.4%
ASF VI B NYC Co-Invest L.P.	2014	10,000,000	8,377,475	9,609,074	3,402,449	1.55	14.2%
Bridgepoint Europe V L.P.	2014	11,431,629	10,633,493	6,920,851	11,239,470	1.71	18.2%
Carlyle Partners VI, L.P. (Side Car)	2014	2,200,000	1,602,271	753,382	2,547,138	2.06	15.3%
Crestview Partners III (Co-Investment B), L.P.	2014	8,000,000	8,284,349	394,887	8,983,414	1.13	3.4%
CVC Capital Partners VI, L.P.	2014	35,214,627	36,413,398	17,952,244	44,812,122	1.72	16.8%
Lexington Capital Partners VIII, L.P.	2014	40,000,000	36,322,254	25,466,703	30,419,172	1.54	19.0%
Olympus Growth Fund VI, L.P.	2014	15,000,000	14,302,574	9,154,163	12,256,907	1.50	13.9%
Vista Equity Partners Fund V, L.P.	2014	40,000,000	49,175,228	47,994,410	51,436,433	2.02	21.2%
ASF VII B L.P.	2015	17,000,000	9,511,514	5,061,828	9,075,445	1.49	17.5%
ASF VII B NYC Co-Invest L.P.	2015	9,000,000	5,551,996	3,600,598	5,545,791	1.65	20.9%
Bridgepoint Europe V Co-Invest	2015	3,502,817	3,241,557	2,674,224	3,983,118	2.05	25.8%
Centerbridge Capital Partners III, L.P.	2015	4,200,000	4,744,225	2,556,755	4,808,938	1.55	20.0%
EQT VII, L.P.	2015	28,434,336	29,569,674	21,841,471	36,640,127	1.98	26.4%
<i>NYCFPF - 2015 Emerging Manager Program</i>	<i>2015</i>	<i>29,750,000</i>	<i>21,765,548</i>	<i>4,533,505</i>	<i>30,688,785</i>	<i>1.62</i>	<i>28.1%</i>
Siris Partners III, L.P.	2015	5,500,000	5,746,976	3,069,965	5,239,994	1.45	14.7%

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Alternative Assets Manager Performance Detail

Through March 31, 2021

	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
Warburg Pincus Private Equity XII, L.P.	2015	36,000,000	35,989,645	11,728,268	47,596,042	1.65	18.6%
Welsh, Carson, Anderson & Stowe XII, L.P.	2015	14,000,000	13,153,378	11,566,660	18,598,327	2.29	32.3%
American Securities Partners VII, L.P.	2016	14,000,000	13,279,242	2,207,226	14,999,838	1.30	9.8%
Apax IX USD, L.P.	2016	22,000,000	21,893,931	7,052,436	36,765,454	2.00	33.3%
BCEC X Co-Investment	2016	6,412,474	6,440,670	40,396	11,949,911	1.86	28.4%
Platinum Equity Capital Partners IV, L.P.	2016	19,000,000	16,815,132	5,928,615	21,714,040	1.64	24.0%
Vista Equity Partners Fund VI, L.P.	2016	28,000,000	31,398,929	17,383,319	40,699,941	1.85	21.9%
Ares Corporate Opportunities Fund V, L.P.	2017	17,000,000	16,989,875	3,233,348	15,479,324	1.10	5.0%
BC European Capital X	2017	15,981,192	14,174,185	264,680	20,563,769	1.47	19.5%
CVC Capital Partners VII, L.P.	2017	31,008,664	19,570,525	385,579	25,936,393	1.34	23.5%
Green Equity Investors VII, L.P.	2017	17,000,000	15,057,349	2,663,297	23,599,997	1.74	25.1%
KKR Americas Fund XII, L.P.	2017	28,000,000	18,156,554	1,973,155	35,356,077	2.06	41.0%
Palladium Equity Partners V, L.P.	2017	6,666,667	3,498,318	38,436	3,690,279	1.07	5.0%
Warburg Pincus Financial Sector, L.P.	2017	21,000,000	16,762,272	1,071,000	20,631,055	1.29	16.9%
Apollo Investment Fund IX, L.P.	2018	52,000,000	14,938,983	3,159,598	17,009,603	1.35	26.8%
ASF VIII B L.P.	2018	36,000,000	7,423,867	109,001	12,015,769	1.63	56.3%
Bridgepoint Europe VI	2018	24,229,426	9,656,647	1,866,919	9,713,899	1.20	NM
EQT VIII Co-Investment	2018	8,103,284	4,348,796	-	6,236,233	1.43	21.5%
EQT VIII, L.P.	2018	22,250,085	16,755,016	475,531	23,954,170	1.46	32.4%
Platinum Equity Capital Partners IV Co-Investment, L.P.	2018	3,000,000	2,104,085	418,633	2,617,141	1.44	16.5%
Platinum Equity Small Cap Fund, L.P.	2018	8,000,000	3,710,643	21,340	3,000,003	0.81	-17.7%
Siris Partners IV, L.P.	2018	18,000,000	9,974,297	1,488,803	10,362,713	1.19	12.2%
Vista Equity Partners Fund VII, L.P.	2018	35,500,000	21,538,016	82,748	22,837,710	1.06	6.6%
Apax X USD L.P.	2019	21,500,000	2,220,950	-	3,913,528	1.76	NM
ASF VIII B NYC Co-Invest L.P.	2019	18,000,000	1,221,134	-	2,713,648	2.22	102.1%
Blackstone Capital Partners VIII L.P.	2019	22,500,000	2,411,725	-	2,630,945	1.09	N/A
Bridgepoint Europe VI Co-Invest	2019	6,108,391	3,573,608	-	4,021,861	1.13	NM
Crestview Partners IV (Co-Investment), L.P.	2019	4,666,667	252,635	-	839,429	3.32	NM
Crestview Partners IV, L.P.	2019	14,000,000	757,902	-	2,159,759	2.85	NM
KKR European Fund V (USD)	2019	17,650,000	7,460,720	291,112	7,287,606	1.02	NM
Lexington Capital Partners IX	2019	21,375,000	7,455,240	1,490,440	9,767,702	1.51	NM
Lexington IX Co-Invest	2019	7,125,000	2,221,931	-	2,957,036	1.33	NM
Lindsay Goldberg V	2019	18,000,000	3,328,418	742	3,638,124	1.09	NM

Information provided by the New York City Fire Retirement System Consultants

Alternative Assets Manager Performance Detail



Through March 31, 2021

	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
<i>NYCFPF - 2019 Emerging Manager Program</i>	<i>2019</i>	<i>37,550,000</i>	<i>3,645,254</i>	<i>101,069</i>	<i>4,426,707</i>	<i>1.24</i>	<i>NM</i>
Platinum Equity Capital Partners V, L.P.	2019	32,000,000	7,124,169	27,268	7,662,533	1.08	NM
Trilantic Capital Partners VI (North America) L.P.	2019	20,000,000	5,381,079	83,160	5,248,665	0.99	NM
Warburg Pincus Global Growth, L.P.	2019	25,500,000	12,529,269	184,875	14,083,929	1.14	16.8%
Welsh, Carson, Anderson & Stowe XIII, L.P.	2019	18,000,000	4,183,917	-	4,703,868	1.12	17.6%
BC Partners Fund XI	2020	24,200,000	-	-	(165,284)	-	NM
Clearlake Capital Partners VI, L.P.	2020	11,000,000	5,337,235	91,725	5,948,909	1.13	NM
EQT IX (No. 2) USD SCSP	2020	21,018,000	4,636,047	9,871	5,783,513	1.25	NM
EQT IX Co-Investment	2020	5,732,000	-	-	(24,497)	-	NM
FTV VI	2020	3,500,000	1,435,000	-	2,151,189	1.50	NM
Green Equity Investors VIII Coinvest N, L.P.	2020	7,500,000	3,156,064	-	3,139,760	0.99	NM
Green Equity Investors VIII, L.P.	2020	22,500,000	3,035,397	-	2,756,433	0.91	NM
Hg Genesis 9, L.P.	2020	11,989,505	88,384	-	425,589	4.82	N/A
KKR Asian Fund IV SCSp	2020	25,000,000	-	-	130,899	-	NM
NYC-NorthBound Emerging Managers Program LP	2020	25,000,000	-	-	94,609	-	NM
Valor Equity Partners V, L.P.	2020	5,500,000	1,964,611	-	2,591,911	1.32	NM
BC Partners XI Metro Co-Investment L.P.	2021	11,000,000	-	-	-	-	N/A
CVC Capital Partners VIII, L.P.	2021	41,045,752	-	-	-	-	N/A
One Rock Capital Partners III, L.P.	2021	9,500,000	-	-	(68,757)	-	NM
Platinum Equity Capital Partners V Co-Investment, L.P.	2021	8,000,000	-	-	-	-	N/A
Stellax Capital Partners II	2021	12,000,000	-	-	-	-	N/A
The Resolute Fund V, L.P.	2021	16,500,000	-	-	(75,816)	-	NM

Information provided by the New York City Fire Retirement System Consultants

Alternative Assets Manager Performance Detail

Through March 31, 2021

	Vintage Year	Style Sector	Original Commitment	Total Contributions	Total Distributions	Market Value	Total Value Multiple	Net IRR%
TOTAL PRIVATE REAL ESTATE			1,276,457,656	1,085,090,308	705,888,313	790,548,289	1.36	7.6%
TOTAL PRIVATE REAL ESTATE								
PRISA SA	2006	Core Portfolio	7,000,000	7,530,220	3,509,478	10,039,802	1.80	4.7%
Prologis Targeted U.S. Logistics Fund	2006	Core Portfolio	35,000,000	6,745,383	2,944,692	11,438,441	2.13	6.7%
RREEF America REIT II	2006	Core Portfolio	7,000,000	9,178,399	5,431,572	10,210,043	1.70	5.1%
UBS Trumbull Property Fund	2006	Core Portfolio	27,000,000	41,213,811	43,677,357	18,384,773	1.51	6.1%
Heitman HART	2007	Core Portfolio	9,000,000	15,649,474	6,649,474	20,465,963	1.73	6.8%
JP Morgan Special Situation Property Fund	2007	Core Portfolio	5,000,000	5,870,702	2,397,849	7,434,136	1.67	4.6%
JP Morgan Strategic Property Fund	2007	Core Portfolio	22,000,000	24,459,391	22,332,766	30,487,096	2.16	7.4%
PRISA II	2007	Core Portfolio	20,228,233	21,417,377	8,775,129	30,675,917	1.84	5.5%
LaSalle Property Fund	2010	Core Portfolio	48,000,000	48,000,000	15,093,919	61,940,886	1.60	8.9%
NYC Asset Investor #2 LLC	2013	Core Portfolio	9,000,000	9,038,861	3,770,524	6,327,713	1.12	2.4%
MetLife Core Property Fund	2014	Core Portfolio	41,000,000	41,000,000	6,272,235	44,838,241	1.25	7.3%
Exeter Industrial Core Club Fund II	2016	Core Portfolio	6,000,000	5,782,201	1,284,915	7,455,307	1.51	15.6%
Jamestown Premier Property Fund	2016	Core Portfolio	8,000,000	11,686,368	4,364,788	8,324,230	1.09	3.0%
NYCRS Artemis Co-Investment	2016	Core Portfolio	11,000,000	12,775,721	4,967,662	11,348,370	1.28	11.9%
USAA Eagle Real Estate Fund	2016	Core Portfolio	30,000,000	30,000,000	132,451	33,630,095	1.13	3.9%
Brookfield Premier Real Estate Partners	2017	Core Portfolio	19,000,000	22,679,790	3,975,933	26,729,788	1.35	8.9%
Carlyle Property Investors	2017	Core Portfolio	19,000,000	22,023,722	3,290,764	25,230,544	1.30	8.8%
Lion Industrial Trust - 2007	2017	Core Portfolio	50,000,000	55,721,633	4,804,126	70,880,147	1.36	14.9%
Almanac Realty Securities VIII	2019	Core Portfolio	10,500,000	2,564,874	117,863	2,598,542	1.06	5.9%
Almanac Realty Securities VIII (Sidecar II)	2019	Core Portfolio	7,000,000	1,748,526	87,107	2,008,309	1.20	19.5%
Artemis Real Estate Partners Income and Growth Fund	2019	Core Portfolio	10,000,000	3,077,844	148,184	2,789,869	0.95	-4.1%
Harrison Street Core Property Fund, L.P.	2019	Core Portfolio	6,700,000	7,114,042	466,933	7,274,398	1.09	6.2%
Heitman Core Real Estate Debt Income Trust	2019	Core Portfolio	8,000,000	9,119,558	1,119,559	9,064,174	1.12	5.7%
HSRE-Centre Street Core Co-Investment, L.P.	2019	Core Portfolio	3,300,000	2,082,525	128,359	2,246,734	1.14	8.3%
Cortland Partners Growth and Income Fund	2020	Core Portfolio	25,000,000	25,439,553	693,452	26,614,445	1.07	8.2%
Exeter Industrial Core Fund III, LP	2020	Core Portfolio	21,300,000	5,787,210	226,061	6,023,140	1.08	13.1%
Kayne Anderson Core Real Estate Fund	2020	Core Portfolio	10,000,000	10,325,659	447,939	10,294,743	1.04	4.7%
Blackstone Fund IV	2004	Non-Core Portfolio	5,000,000	6,406,782	9,025,231	120,888	1.43	10.4%
The City Investment Fund I	2004	Non-Core Portfolio	35,000,000	34,515,181	34,904,154	54,320	1.01	0.3%
Blackstone Real Estate Partners VI	2007	Non-Core Portfolio	10,000,000	11,170,327	21,900,824	374,788	1.99	13.2%
Carlyle Realty Partners V	2007	Non-Core Portfolio	5,000,000	6,347,279	8,335,991	945,273	1.46	8.6%
Colony Investors VIII	2007	Non-Core Portfolio	20,000,000	21,249,679	9,077,467	377,071	0.44	-11.4%
Metropolitan Workforce Housing Fund	2007	Non-Core Portfolio	3,500,000	3,503,257	4,186,143	64,596	1.21	3.8%
AG Realty Fund VII	2008	Non-Core Portfolio	15,000,000	14,100,000	21,096,846	173,012	1.51	12.6%

Information provided by the New York City Retirement Systems Consultants. Interim returns are subject to change and may differ due to differences in accounting and performance methodologies.

Alternative Assets Manager Performance Detail

Through March 31, 2021

	Vintage Year	Style Sector	Original Commitment	Total Contributions	Total Distributions	Market Value	Total Value Multiple	Net IRR%
American Value Partners Fund I	2008	Non-Core Portfolio	5,000,000	3,785,294	3,471,997	213,047	0.97	-0.5%
Ares European Real Estate Fund III, LP	2008	Non-Core Portfolio	15,000,000	15,243,750	16,746,250	130,124	1.11	2.6%
Silverpeak Legacy Partners III	2008	Non-Core Portfolio	5,000,000	2,216,844	467,199	258,200	0.33	-11.0%
Stockbridge Real Estate Fund III	2008	Non-Core Portfolio	13,500,000	13,499,074	8,414,877	8,295,472	1.24	2.7%
Thor Urban Property Fund II	2009	Non-Core Portfolio	5,000,000	6,849,514	6,847,656	657,193	1.10	2.9%
Walton Street Real Estate Fund VI	2009	Non-Core Portfolio	5,000,000	4,432,393	5,072,700	1,639,704	1.51	7.9%
Blackstone Real Estate Partners Europe III (USD Vehicle)	2010	Non-Core Portfolio	5,000,000	5,228,826	7,115,819	575,144	1.47	10.5%
Westbrook Real Estate Fund VIII	2010	Non-Core Portfolio	5,000,000	5,976,064	6,889,968	708,640	1.27	9.9%
Carlyle Realty Partners VI	2011	Non-Core Portfolio	20,000,000	19,329,392	31,374,837	1,500,243	1.70	24.5%
H/2 Special Opportunities Fund II	2011	Non-Core Portfolio	10,000,000	10,000,001	14,562,251	182,719	1.47	13.2%
Blackstone Real Estate Partners VII	2012	Non-Core Portfolio	30,000,000	38,095,599	48,974,006	11,875,773	1.60	15.2%
Brookfield Strategic Real Estate Partners	2012	Non-Core Portfolio	15,000,000	17,262,297	26,534,044	7,455,960	1.97	19.1%
Divco West Fund III	2012	Non-Core Portfolio	30,000,000	29,429,127	50,867,781	38,086	1.73	23.9%
Taconic New York City Investment Fund LP	2012	Non-Core Portfolio	20,000,000	8,363,637	13,682,720	972,771	1.75	15.3%
NYC Asset Investor #1 LLC	2013	Non-Core Portfolio	5,000,000	5,543,383	2,546,425	3,432,907	1.08	1.6%
NYC Asset Investor #3 LLC	2013	Non-Core Portfolio	6,000,000	4,208,626	759,574	4,493,537	1.25	5.4%
Blackstone Real Estate Partners Europe IV (USD Vehicle)	2014	Non-Core Portfolio	26,000,000	25,349,397	29,534,062	8,226,941	1.49	13.0%
Carlyle Realty Partners VII	2014	Non-Core Portfolio	15,000,000	13,648,346	14,363,987	5,677,465	1.47	14.5%
Divco West Fund IV	2014	Non-Core Portfolio	30,000,000	29,700,495	45,575,160	4,264,285	1.68	25.0%
Lone Star Real Estate Fund III	2014	Non-Core Portfolio	25,000,000	23,435,387	30,422,354	1,195,590	1.35	14.0%
Avanath Affordable Housing Fund II	2015	Non-Core Portfolio	2,220,000	2,158,370	851,507	2,928,679	1.75	11.4%
Blackstone Real Estate Partners VIII	2015	Non-Core Portfolio	31,500,000	34,694,651	24,249,000	24,916,371	1.42	14.1%
H/2 Special Opportunities Fund III	2015	Non-Core Portfolio	15,000,000	15,577,770	13,231,169	5,445,486	1.20	6.8%
European Property Investors Special Opportunities IV (EPISO IV)	2016	Non-Core Portfolio	10,059,238	9,050,919	2,361,330	9,735,917	1.34	10.7%
PW Real Estate Fund III LP	2016	Non-Core Portfolio	9,562,261	7,531,899	3,201,177	11,738,514	1.98	28.3%
Westbrook Real Estate Fund X	2016	Non-Core Portfolio	8,000,000	7,691,269	4,783,156	4,372,438	1.19	10.6%
Divco West Fund V	2017	Non-Core Portfolio	12,000,000	7,345,487	1,419,488	7,269,288	1.18	6.1%
DRA Growth and Income Fund IX	2017	Non-Core Portfolio	8,000,000	7,931,368	2,822,659	7,591,154	1.31	13.8%
Exeter Industrial Value Fund IV	2017	Non-Core Portfolio	10,000,000	9,443,137	1,019,608	13,730,169	1.56	21.4%
H/2 Special Opportunities Fund IV	2017	Non-Core Portfolio	19,000,000	19,000,000	-	21,603,066	1.14	8.6%
KKR CMBS B-Piece SMA	2017	Non-Core Portfolio	25,000,000	22,313,016	5,638,526	20,531,274	1.19	6.9%
Lone Star Real Estate Fund V	2017	Non-Core Portfolio	23,100,000	6,218,670	3,327,441	2,230,165	0.89	-7.4%
Primerica Real Estate Capital VI (PRECap VI)	2017	Non-Core Portfolio	10,040,161	9,918,660	5,856,519	5,822,981	1.18	12.1%
Basis Investment Group Fund I	2018	Non-Core Portfolio	4,100,000	2,955,981	982,132	2,675,883	1.24	12.9%
KKR Real Estate Partners Americas II	2018	Non-Core Portfolio	20,070,000	19,508,801	7,101,366	15,199,330	1.29	22.6%
AERMONT Real Estate Fund IV	2019	Non-Core Portfolio	10,271,627	2,425,925	-	1,851,769	0.76	-19.9%
Blackstone Real Estate Partners IX	2019	Non-Core Portfolio	34,000,000	12,909,190	1,847,884	13,785,357	1.21	22.6%

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Alternative Assets Manager Performance Detail

Through March 31, 2021

	Vintage Year	Style Sector	Original Commitment	Total Contributions	Total Distributions	Market Value	Total Value Multiple	Net IRR%
Brookfield Strategic Real Estate Partners III	2019	Non-Core Portfolio	30,000,000	17,029,966	272,481	18,947,352	1.13	10.4%
Blackstone Real Estate Partners Europe VI (EURO Vehicle)	2020	Non-Core Portfolio	19,997,747	6,884,837	17,505	7,621,275	1.11	16.8%
Divco West Fund VI	2020	Non-Core Portfolio	17,000,000	1,021,996	-	909,556	0.89	-12.6%
DRA Growth & Income Fund X	2020	Non-Core Portfolio	13,000,000	3,130,264	567,648	2,919,793	1.11	18.5%
ElmTree Net Lease Fund IV	2020	Non-Core Portfolio	11,000,000	2,245,182	-	2,109,665	0.94	-10.6%
GreenOak Asia III (USD Vehicle)	2020	Non-Core Portfolio	14,000,000	6,728,420	4,583,369	2,331,565	1.03	7.4%
Exeter Industrial Value Fund V	2021	Non-Core Portfolio	10,000,000	2,500,000	-	2,825,972	1.13	15.4%
KKR RESDOC	2021	Non-Core Portfolio	21,000,000	9,518,582	1,892,934	10,307,620	1.28	32.4%
PGIM Real Estate Capital VII ("PRECap VII")	2021	Non-Core Portfolio	19,508,389	1,519,566	-	1,498,066	0.99	-1.4%
Westbrook Real Estate Fund XI	2021	Non-Core Portfolio	10,000,000	913,587	-	989,989	1.08	37.8%

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Alternative Assets Manager Performance Detail

Through March 31, 2021

	Vintage Year	Original Commitment	Total Contributions	Total Distributions	Market Value	Total Value Multiple	Net IRR%
TOTAL INFRASTRUCTURE							
		379,018,509	187,699,861	52,338,221	192,817,366	1.31	12.0%
TOTAL INFRASTRUCTURE INVESTMENTS							
Brookfield Infrastructure Fund II, L.P.	2013	15,000,000	12,733,154	5,729,330	17,160,923	1.80	13.0%
Global Energy & Power Infrastructure Fund II	2014	10,000,000	10,560,000	8,665,238	5,839,083	1.37	20.7%
IFM Global Infrastructure Fund	2014	10,000,000	13,351,525	5,266,542	16,239,839	1.61	11.2%
KKR Global Infrastructure Investors II L.P.	2014	12,000,000	12,888,222	11,246,128	10,535,528	1.69	18.4%
Actis Energy 4	2016	12,900,000	9,915,027	2,937,710	9,868,000	1.29	12.3%
ASF VII Infrastructure L.P.	2016	15,000,000	8,846,246	650,721	10,534,683	1.26	16.9%
Brookfield Infrastructure Fund III, L.P.	2016	19,000,000	11,780,071	3,230,679	11,817,653	1.28	9.9%
Global Infrastructure Partners III-A/B, L.P.	2016	22,000,000	19,897,578	4,295,542	19,728,204	1.21	7.1%
Axiom Infrastructure North America (2017)	2017	15,220,450	15,624,979	2,960,734	16,262,744	1.23	9.9%
EQT Infrastructure III (No.2) SCSp	2017	11,242,261	11,816,804	1,750,269	16,081,885	1.51	19.2%
NYCRS EIG Energy Partners, L.P.	2017	15,300,000	5,867,517	1,410,336	5,212,939	1.13	7.9%
Cardinal NR Sidecar Holdings L.P.	2018	2,060,000	2,073,203	511,871	2,583,715	1.49	18.8%
EQT Infrastructure IV (No.2) USD SCSp	2018	20,000,000	12,136,379	473,250	13,249,108	1.13	11.0%
Global Infrastructure Partners IV-A/B, L.P.	2018	24,700,000	2,414,493	0	1,664,371	0.69	-64.6%
KKR Global Infrastructure Investors III L.P.	2018	17,200,000	8,509,357	606,143	6,975,251	0.89	-8.9%
Ardian Infrastructure Fund V B	2019	16,227,199	1,927,137	96,213	1,990,687	1.08	6.5%
Brookfield Infrastructure Fund IV Co-Investment (Snow)	2019	2,000,000	2,008,446	133,054	2,210,604	1.17	12.5%
Brookfield Infrastructure Fund IV, L.P.	2019	21,000,000	10,719,395	1,283,154	10,835,445	1.13	12.0%
Global Energy & Power Infrastructure Fund III, L.P.	2019	17,200,000	6,609,664	982,055	6,228,121	1.09	11.0%
BIS NYC Infrastructure Emerging Manager Opportunities Fund	2020	14,980,000	815,743	-	805,964	NM	NM
EQT Infrastructure IV Co-Investment (B) SCSp (Saber)	2020	1,800,000	1,818,000	109,250	2,039,187	1.18	16.9%
EQT Infrastructure IV Co-Investment (F) SCSp (Connect)	2020	2,300,000	2,308,214	-	2,609,365	NM	NM
EQT Infrastructure IV Co-Investment (G) SCSp (Lightspeed)	2020	3,068,600	3,078,707	-	3,122,191	NM	NM
EQT Infrastructure V (No.2) USD SCSp	2020	40,000,000	-	-	(555,992)	NM	NM
NYCRS EIG Energy Partners Co-Investment, L.P.	2021	3,820,000	-	-	-	-	0.0%
Stonepeak Infrastructure Fund IV, L.P.	2021	35,000,000	-	-	(222,133)	NM	NM

Information provided by the New York City Fire Retirement System Consultants

Alternative Assets Manager Performance Detail

Through June 30, 2021

	Vintage Year	Commitment - Closing (Base)	Contributions Cumulative (Local)	Distributions Cumulative	Final Market Value	3 Month Base%	Inception IRR%
TOTAL OPPORTUNISTIC FIXED INCOME		676,963,962	735,444,732	376,817,701	613,019,325	4.62%	8.08%
Avenue Special Situations Fund V, L.P.	2007	5,052,332	5,130,079	6,706,716	-	-	10.89%
Avenue Europe Special Sit. Fund, L.P.	2008	5,286,630	4,495,867	8,970,029	-	-	15.01%
PIMCO DiSCO Fund, L.P.	2008	25,000,000	25,071,292	34,076,267	-	-	11.23%
Torchlight Debt Opportunity Fund III, LLC	2009	15,000,000	15,991,888	23,792,157	-	-	13.36%
Avenue Special Situations Fund VI (A), L.P.	2011	15,000,000	15,378,545	15,272,631	1,872,338	-0.39%	2.35%
GoldenTree Managed Account	2011	32,000,000	32,200,730	-	58,800,580	2.33%	7.34%
Marathon Centre Street Partnership, L.P. - Asset Class	2011	46,875,000	76,125,000	40,031,250	76,966,761	9.61%	8.26%
AG Centre Street Partnership, L.P. - CC Asset Class	2012	35,000,000	39,725,000	9,260,636	45,648,459	2.66%	6.05%
Apollo Centre Street Partnership, L.P.	2012	63,333,333	103,763,669	77,280,649	48,856,586	3.01%	6.70%
FCO MA Centre Street L.P.	2012	30,000,000	58,943,557	44,326,949	33,264,648	3.69%	8.74%
OHA Centre Street Partnership, L.P.	2012	56,250,000	66,192,354	15,665,796	81,880,026	3.29%	8.78%
Contrarian Centre Street Partnership, L.P. - Asset Class	2013	15,000,000	15,000,000	-	18,290,669	7.26%	3.19%
Oaktree Opportunities Fund IX, L.P.	2013	30,000,000	30,000,000	18,652,838	21,435,363	8.22%	5.08%
Ares Centre Street Partnership, L.P.	2014	30,000,000	30,000,000	-	49,448,013	3.29%	9.49%
Brightwood Capital Fund III, L.P.	2015	8,000,000	6,492,299	5,900,496	2,692,601	2.72%	6.49%
Torchlight Debt Opportunity Fund V, LP	2015	20,000,000	16,000,000	15,925,060	4,787,960	3.05%	10.65%
Brightwood Capital Fund IV, LP	2016	20,000,000	20,000,000	6,190,313	17,740,602	3.51%	7.99%
ICG Centre Street Partnership, L.P.	2017	30,000,000	40,320,115	22,150,521	23,876,161	1.92%	9.32%
KKR OFI SMA	2017	55,000,000	42,268,462	10,702,964	44,902,626	11.87%	14.56%
Maranon Centre Street Partnership, L.P.	2018	21,000,000	19,381,023	527,182	21,964,599	3.96%	7.91%
FCO MA Centre Street II (PF) LP	2019	30,000,000	30,712,844	19,452,950	16,963,063	4.01%	29.66%
Torchlight Debt Fund VI, LP	2019	20,000,000	20,564,508	1,932,298	20,051,858	1.81%	4.77%
KKR-NYC Credit C L.P.	2020	10,416,667	2,343,750	-	2,676,484	7.75%	52.80%
Marathon Centre Street Partnership, L.P. - Asset Class - Subsequent Commitment	2020	18,750,000	9,843,750	-	11,262,051	2.18%	36.98%
Torchlight Debt Fund VII, LP	2020	25,000,000	5,000,000	-	5,112,474	0.28%	4.94%
400 Capital Centre Street LP	2021	15,000,000	4,500,000	-	4,525,402	0.58%	3.31%

Information provided by Alpha Frontier
Above data is not final and subject to change

Alternative Assets Manager Performance Detail

Through June 30, 2021

	Market Value	MTD Return%	3 Month Return%	FYTD Return%	YTD Return%	1 Year Return%	3 Year Return%	ITD Return%	ITD Cumulative Return%
TOTAL HEDGE FUNDS	924,220,593	-0.60%	2.88%	13.53%	3.58%	13.53%	8.33%	5.38%	68.89%
TOTAL DIRECT HEDGE FUNDS	924,212,947	-0.60%	2.88%	13.53%	3.58%	13.53%	8.33%	6.15%	77.22%
FUND OF FUNDS HEDGE FUNDS	7,646	3.70%	-0.84%	6.00%	-3.52%	6.00%	-0.19%	1.66%	17.93%
TOTAL DIRECT HEDGE FUNDS									
D.E. Shaw Composite Fund, L.L.C.	107,638,761	0.11%	3.68%	18.98%	9.27%	18.98%	15.48%	13.80%	241.37%
Voloridge Fund, LP	36,173,352	2.77%	0.26%	0.11%	-6.45%	0.11%		17.16%	44.69%
Voloridge Trading Aggressive Fund, LP	10,074,785	0.77%	4.17%	8.96%	0.11%	8.96%		21.43%	57.31%
Relative Value	153,886,898	0.76%	2.88%	13.30%	4.52%	13.30%	14.35%	12.11%	196.33%
AlphaQuest Original LLC	62,499,806	-0.36%	1.12%	3.30%	11.99%	3.30%	2.05%	5.86%	26.18%
Florin Court Capital Fund	43,810,140	1.88%	9.20%	14.24%	9.72%	14.24%		10.20%	32.76%
GreshamQuant - ACAR Fund, LLC	28,293,871	5.49%	19.12%	38.14%	25.78%	38.14%		18.94%	41.47%
GSA Trend Fund LP	61,788,917	-3.05%	2.97%	7.71%	7.88%	7.71%	2.53%	0.05%	0.19%
Key Square Partners LP	53,567,570	-7.93%	-1.95%	-1.72%	-5.04%	-1.72%	-5.56%	-4.06%	-15.58%
Pharo Gaia Fund, LTD.	63,387,790	-2.70%	-0.07%	2.74%	-8.81%	2.74%	5.91%	9.31%	64.39%
Pharo Macro Fund, Ltd.	44,409,980	-2.54%	0.12%	3.57%	-7.15%	3.57%	3.56%	7.05%	72.51%
Tactical Trading	357,758,073	-2.03%	1.85%	2.99%	1.23%	2.99%	5.10%	3.74%	42.20%
Caspian Select Credit Fund, L.P.	79,449,346	1.45%	2.63%	20.85%	6.14%	20.85%	6.54%	4.83%	54.12%
DL Partners Opportunities Fund LP	46,718,191	-4.42%	0.62%	18.49%	5.13%	18.49%		6.50%	18.27%
Luxor Capital Partners Liquidating SPV, LLC.	748,084	-0.04%	9.46%	7.93%	6.66%	7.93%		-4.62%	-12.20%
Luxor Capital Partners, LP	82,218,751	1.92%	11.38%	29.77%	0.37%	29.77%	17.75%	9.00%	84.16%
Perry Partners L.P.	38,769	35.27%	35.27%	83.75%	72.91%	83.75%	16.21%	3.90%	36.21%
Standard General Fund II L.P.	20,323,819	0.54%	-4.50%	62.78%	13.65%	62.78%	8.55%	9.50%	49.32%
Event Driven	229,496,960	0.28%	4.48%	26.26%	4.43%	26.26%	9.62%	6.11%	72.27%
Altimeter Partners Fund LP	36,612,199	2.05%	6.62%	44.56%	7.23%	44.56%	18.34%	14.86%	109.33%
Lansdowne European Absolute Opportunities Fund, L.P.	27,309,680	-1.63%	-0.74%	1.84%	-0.70%	1.84%		-5.90%	-11.90%
SRS Partners US, LP	55,553,938	-4.68%	0.81%	25.52%	8.05%	25.52%	8.36%	8.29%	67.86%
Turiya Fund LP	63,595,199	4.02%	4.05%	40.73%	9.00%	40.73%	15.28%	6.33%	44.51%
Long/Short Equity	183,071,016	0.01%	2.80%	26.90%	6.64%	26.90%	9.14%	6.07%	60.20%
FUND OF FUNDS HEDGE FUNDS									
Fund of Funds Hedge Funds	7,646	3.70%	-0.84%	6.00%	-3.52%	6.00%	-0.19%	1.66%	17.93%

Information provided by Alpha Frontier

New York City
Fire Department Pension Fund, Subchapter Two

Appendix D

Footnotes

Through June 30, 2021

General Notes

- Estimated management fees for public market investments are calculated on an accrual basis without adjustment for management fee caps. Alternative investment (Private Market) fees are recorded on a cash basis and are not inclusive of carried interest paid. Since not all alternative managers currently provide detailed fee disclosure, the alternative investment fees noted here are not comprehensive.
- Returns greater than 1 year are annualized.
- 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 7 - 12 - Portfolio Asset Allocation

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

Pages 13 - 15 - 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



Through June 30, 2021

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 * 29.42%

International Developed (EAFE) Markets: MSCI World ex USA IMI Net * 8.44%

International Active – Global: MSCI ACWI * 1.48%

Emerging Markets: MSCI Emerging Markets * 5.87%

International Emerging Managers FOF: MSCI ACWI Ex US IMI Net * 0.53%

REITs: Dow Jones Real Estate Securities * 0.00%

Private Equity: Russell 3000 + 300 b.p. per annum * 6.87%

Private Real Estate – Core: NFI - ODCE Net * 2.67%

Private Real Estate – Non Core: NFI - ODCE Net + 200bps * 1.53%

Infrastructure: CPI + 4% * 1.02%

Hedge Funds: HFRI Fund of Funds Composite Index plus 1% * 5.00%

US Treasury Short Term: FTSE USBIG Treasury 1-3Y * 6.03%

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

Active Government: NYC Treasury Agency + 5 * 0.00%

US Treasury Long Duration: FTSE Treasury 10+ * 7.14%

Core FI-Developing Mgrs: Bloomberg U.S. Aggregate * 0.00%

Core FI-Emerging Mgrs: Bloomberg U.S. Aggregate * 0.00%

Through June 30, 2021

*Mortgage: Bloomberg US Mortgage Backed Securities * 4.89%*

*ETI: ETI Custom Benchmark * 0.64%*

*Investment Grade Corporate: NYC Custom IGC Benchmark * 4.42%*

*High Yield: Bloomberg U.S. HY - 2% Issuer Cap * 6.44%*

*Bank Loans: Credit Suisse Leveraged Loan * 0.00%*

*TIPS: Bloomberg Global Infl-Linked: U.S. TIPS * 4.50%*

*Convertible Bonds: ICE BofA All US Conv Ex Mandatory * 0.00%*

*Opportunistic Fixed: OFI - JPMGHY / CSFB 50/50 Blend Plus 300 b.p. per annum * 3.12%*

Page 16 – 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.

Through June 30, 2021

-
- [1] NYC Developed Growth Benchmark: Beginning 8.2017 benchmark changed from MSCI EAFE Growth to MSCI World ex USA Net Index.
 - [2] NYC Developed Value Benchmark: Beginning 8.2017 benchmark changed from MSCI EAFE Value Net to MSCI World ex USA Net Index.
 - [3] NYC Custom World ex US Index: Beginning 2.2017 benchmark changed from MSCI EAFE to MSCI World ex USA Net Index.
 - [4] Name changed from SSGA MSCI EAFE Small Cap Index 12.2017
 - [5] World ex USA SC PASSIVE CUSTOM BM: Beginning 12.2017 benchmark changed from MSCI EAFE Small Cap Net to MSCI World ex US Small Cap (Net).
 - [6] NYC Custom IGC Benchmark: Beginning 3.2021 benchmark changed from NYC - Investment Grade Credit to Bloomberg U.S. Corporate Inv Grade.
 - [7] NYC Custom Mortgage Benchmark: Beginning 9.2020 benchmark changed from FTSE Mortgage Index to Bloomberg US Mortgage Backed Securities.
 - [8] Assets were in transition from 9/29/17 to 2/11/19
 - [9] Assets were in transition from 9/29/17 to 11/30/17



New York City
Fire Officers' Variable Supplements Fund
Performance Overview as of June 30, 2021

Total Fund Overview

New York City Fire Officers' Variable Supplements Fund

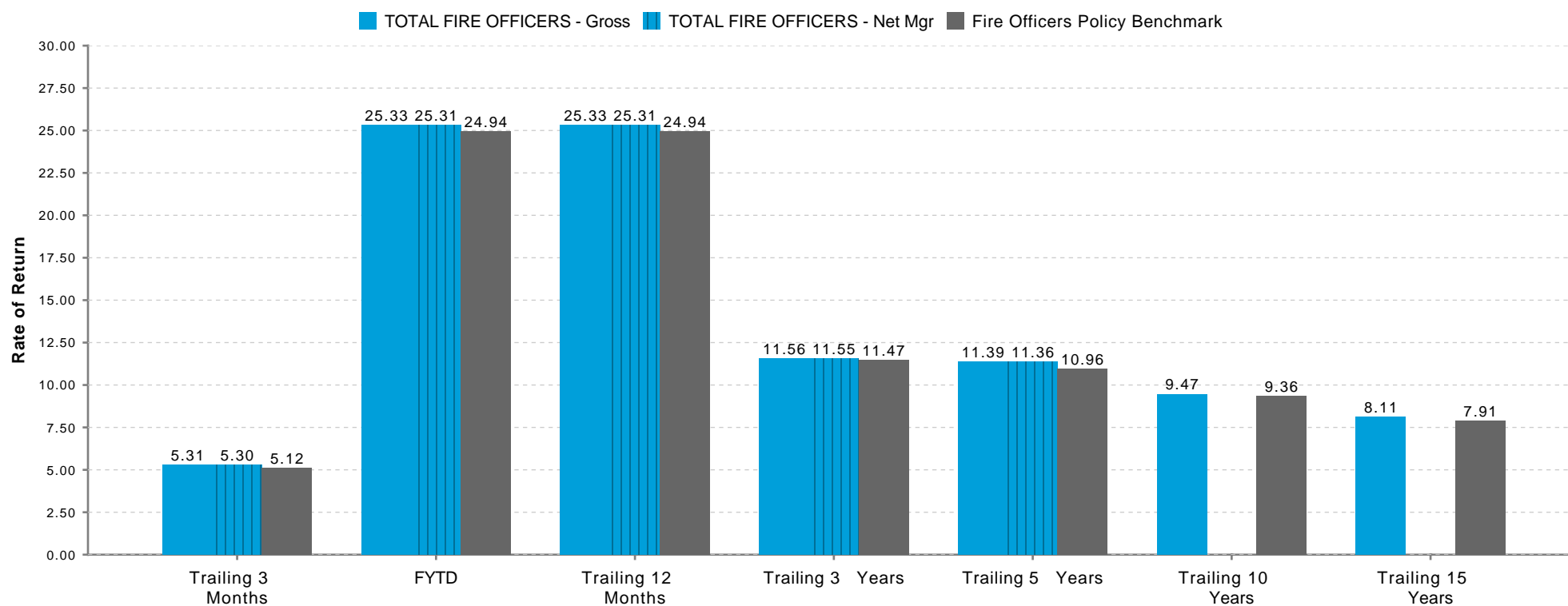
Table of Contents:

Performance Charts	p.3
Appendix A - Consolidated Performance Report	p.10
Appendix B - Public Markets Manager Performance Detail	p.14
Appendix C - Footnotes	p.17

Market Value (Millions)

\$413.1

TOTAL FIRE OFFICERS



	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	11.7	12.1	11.4	9.8	9.5	9.5	9.6	9.5

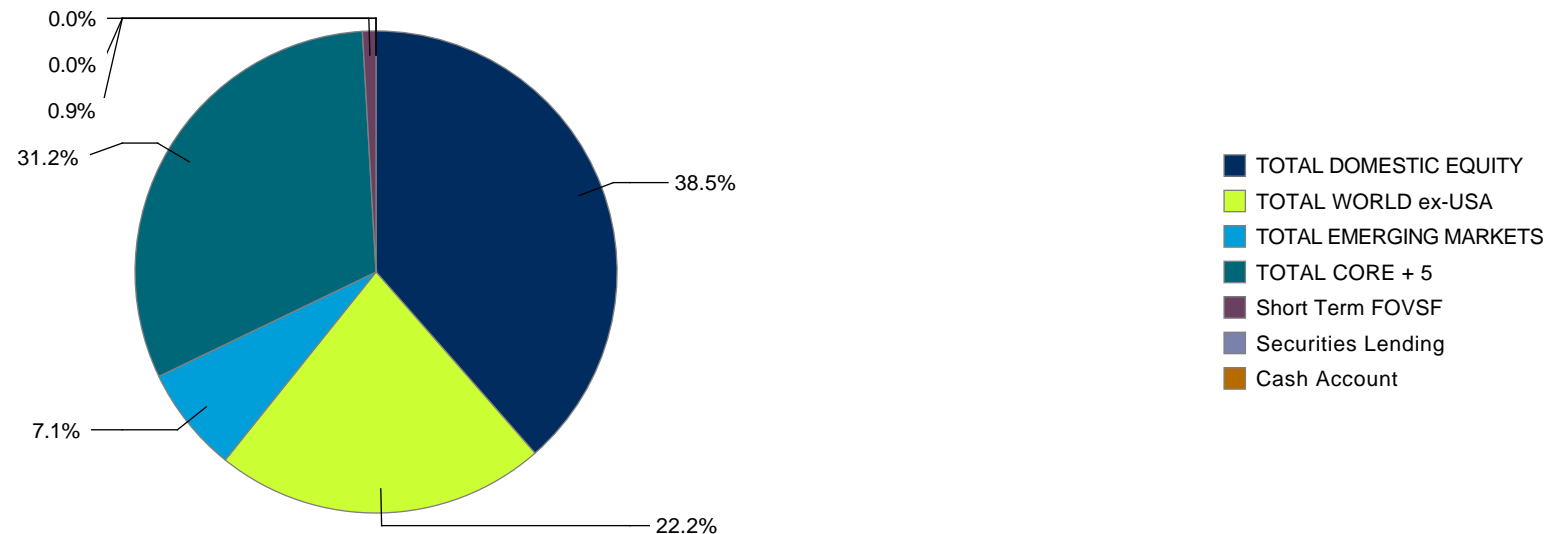


TOTAL FIRE OFFICERS

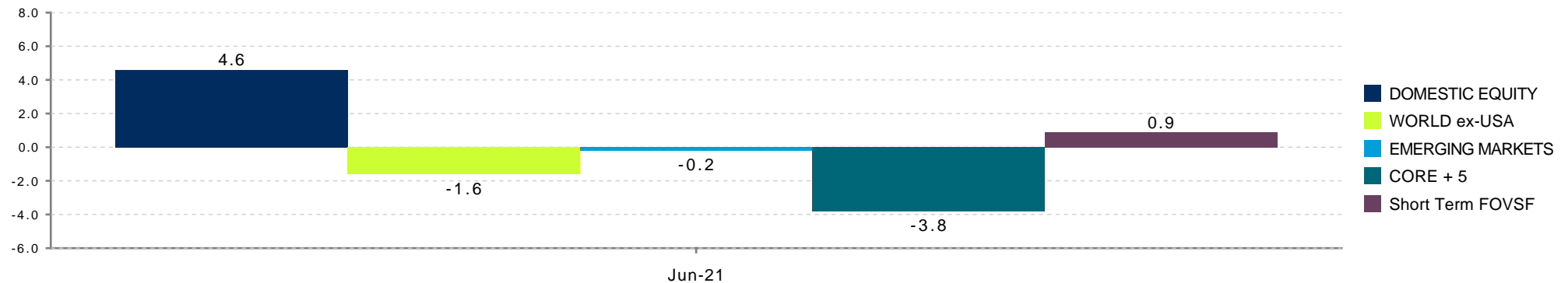
Market Value (Millions)

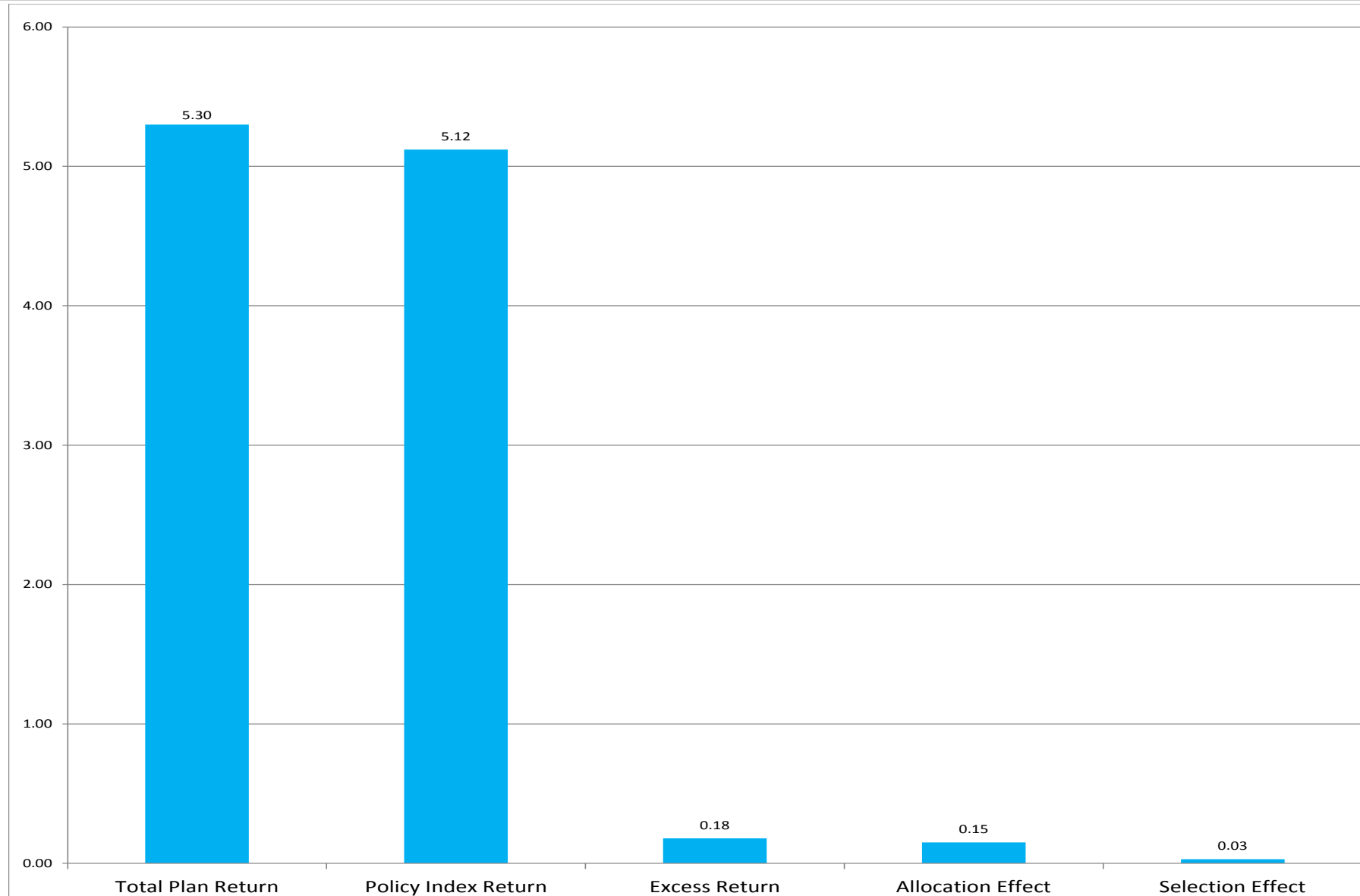
\$413.1

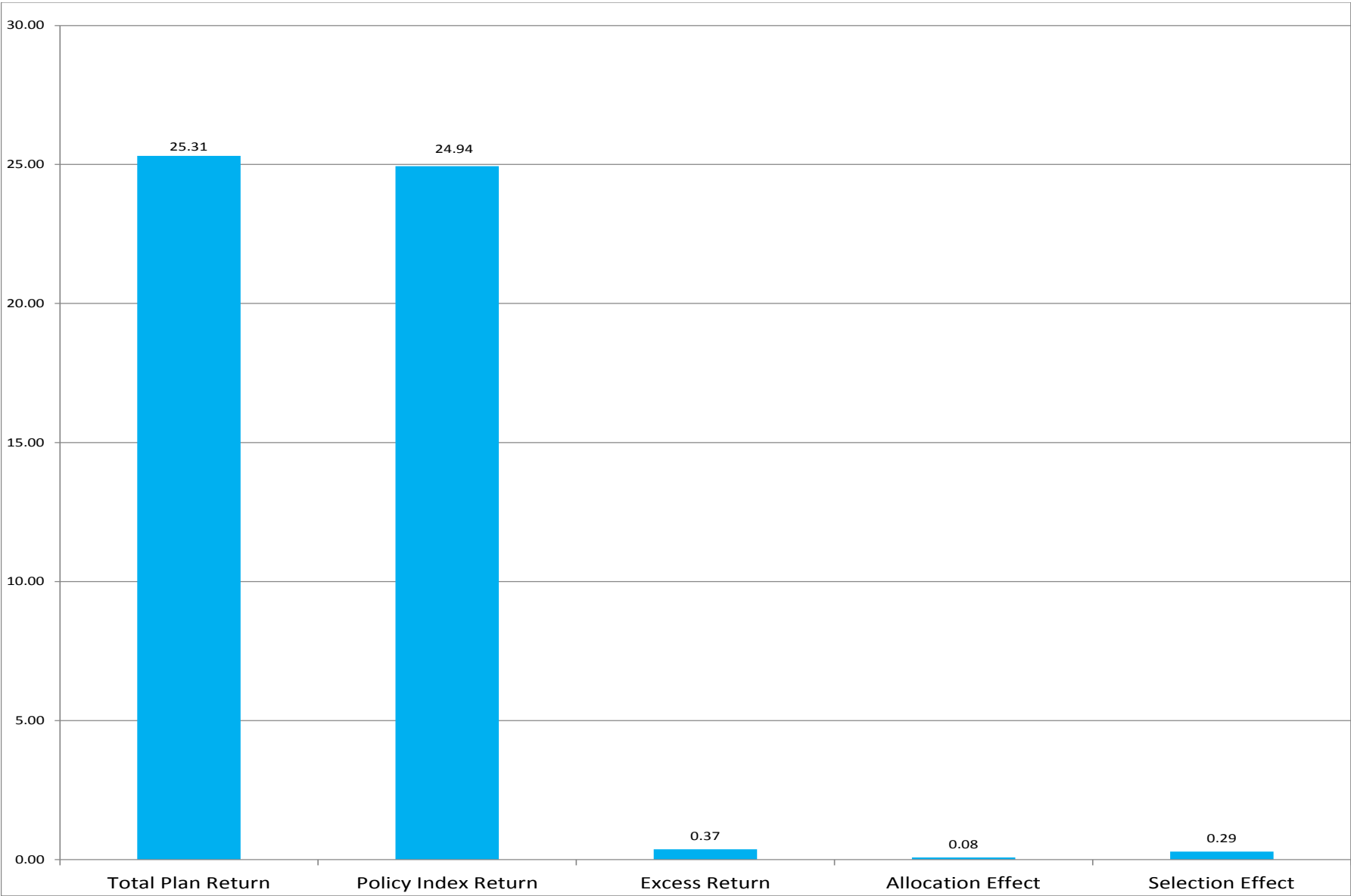
Asset Allocation

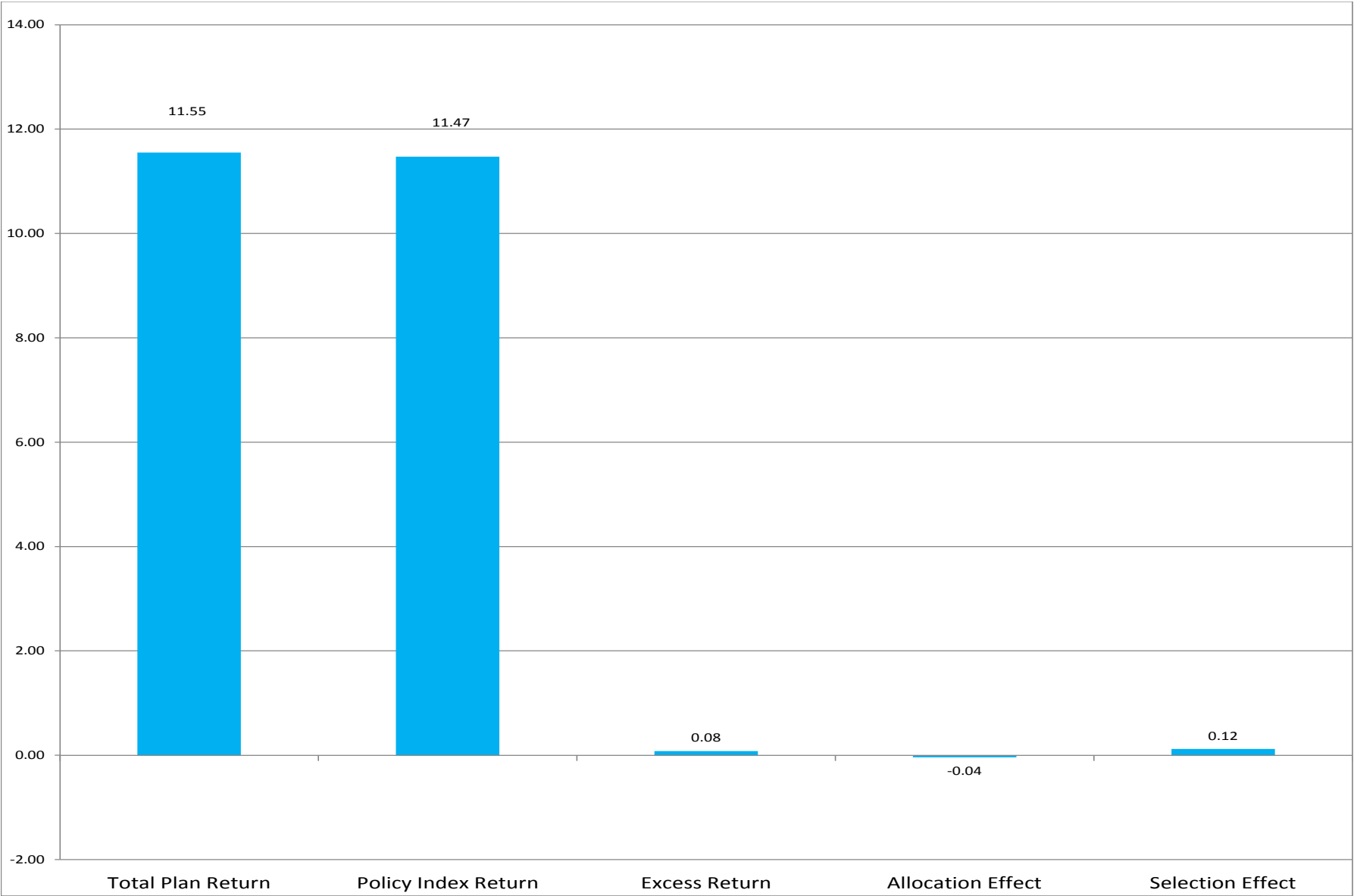


Relative Mix to Asset Weights











Allocation Effect - Asset Class Breakdown				
	<u>Quarter</u>	<u>FYTD</u>	<u>3 Years</u>	<u>Benchmark</u>
TOTAL FIRE OFFICERS	0.15	0.08	-0.04	Fire Officers Policy Benchmark
TOTAL DOMESTIC EQUITY	0.12	0.44	0.11	RUSSELL 3000
TOTAL WORLD ex-USA EQUITY	-0.02	-0.31	0.01	MSCI World ex USA IMI Net
TOTAL EMERGING MARKETS	0.00	0.04	-0.01	MSCI EMERGING MARKETS
TOTAL STRUCTURED	0.10	0.04	-0.07	Bloomberg Aggregate
TOTAL CASH	-0.04	-0.12	-0.09	

Selection Effect - Asset Class Breakdown				
	<u>Quarter</u>	<u>FYTD</u>	<u>3 Years</u>	<u>Benchmark</u>
TOTAL FIRE OFFICERS	0.03	0.29	0.12	Fire Officers Policy Benchmark
TOTAL DOMESTIC EQUITY	-0.02	0.16	0.03	RUSSELL 3000
TOTAL WORLD ex-USA EQUITY	0.03	0.12	0.06	MSCI World ex USA IMI Net
TOTAL EMERGING MARKETS	-0.01	0.01	0.00	MSCI EMERGING MARKETS
TOTAL STRUCTURED	0.03	0.01	0.04	Bloomberg Aggregate
TOTAL CASH	0.00	0.00	0.00	



NYC FIRE OFFICERS' VARIABLE SUPPLEMENTS FUND SECURITIES LENDING INCOME

June 30, 2021

	U. S. FIXED INCOME	U. S. EQUITY	INTERNATIONAL EQUITY	TOTAL
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	8,191	18,555	67,043	93,789
2020	15,965	17,049	51,526	84,540
2021 (6 months)	12,662	11,498	20,285	44,446
Since Inception	<u>782,730</u>	<u>1,370,454</u>	<u>1,171,537</u>	<u>3,324,721</u>



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

Appendix A

Consolidated Performance Report

Consolidated Performance Report



Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE 2020	CYE 2020	CYE 2019	CYE 2018	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
SYSTEM RETURN SUMMARY															
5 FIRE OFFICERS-TOTAL PORTFOLIO - GROSS	413	100.00	5.31	25.33	7.87	4.33	13.51	20.17	(5.83)	25.33	11.56	11.39	9.47	8.75	01/01/1988
FIRE OFFICERS- ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)	(0.03)			
EST MANAGEMENT FEES			(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)	(0.03)			
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
FIRE OFFICERS-TOTAL PORTFOLIO - NET MGR			5.30	25.31	7.87	4.32	13.50	20.15	(5.83)	25.31	11.55	11.36			
FIRE OFFICERS POLICY BENCHMARK			5.12	24.94	7.32	4.30	13.79	20.32	(6.22)	24.94	11.47	10.96	9.36		
EXCESS RETURN			0.19	0.38	0.55	0.02	(0.29)	(0.17)	0.39	0.38	0.08	0.41	0.11		
EQUITY RETURN DETAIL															
17 FOVSF-TOTAL EQUITY - GROSS	280	67.88	7.00	41.22	12.71	1.39	16.54	26.86	(9.53)	41.22	14.58	15.15	11.83	7.84	08/01/2001
ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)			
EST MANAGEMENT FEES			(0.00)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)			
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
FOVSF-TOTAL EQUITY - NET MGR			6.99	41.21	12.71	1.38	16.53	26.85	(9.53)	41.21	14.57	15.13			
25 FOVSF-TOTAL DOMESTIC EQUITY - GROSS	159	38.54	8.19	44.48	15.24	6.37	20.87	30.94	(5.09)	44.48	18.75	17.96	14.78	11.13	01/01/1991
ESTIMATED INVESTMENT FEES			(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)			
FOVSF-TOTAL DOMESTIC EQUITY - NET MGR			8.19	44.48	15.24	6.36	20.87	30.94	(5.09)	44.48	18.75	17.96			
RUSSELL 3000/S&P500 04/30/09			8.24	44.16	15.11	6.53	20.89	31.02	(5.24)	44.16	18.73	17.89	14.70	11.07	
EXCESS RETURN			(0.05)	0.32	0.13	(0.17)	(0.02)	(0.08)	0.15	0.32	0.02	0.08	0.09	0.06	

Consolidated Performance Report



Through June 30, 2021

		Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE 2020	CYE 2020	CYE 2019	CYE 2018	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
EQUITY RETURN DETAIL																
37	FOVSF-TOTAL WORLD ex-USA - GROSS	92	22.23	5.65	35.38	10.08	(4.93)	8.90	22.99	(14.40)	35.38	8.88	12.74	6.02	6.44	07/01/1994
	ESTIMATED INVESTMENT FEES			(0.00)	(0.02)	(0.01)	(0.01)	(0.02)	(0.01)	(0.02)	(0.02)	(0.02)	(0.07)			
	FOVSF-TOTAL WORLD ex-USA - NET MGR			5.64	35.36	10.07	(4.94)	8.88	22.98	(14.41)	35.36	8.86	12.67			
	WORLD EX-USA CUSTOM BM			5.52	34.82	9.92	(5.11)	8.32	22.91	(14.68)	34.82	8.62	10.77	6.33	5.45	
	EXCESS RETURN			0.12	0.54	0.16	0.17	0.55	0.07	0.27	0.54	0.25	1.91	(0.31)	0.99	
47	FOVSF- TOTAL EMERGING MARKETS - GROSS	29	7.11	4.91	40.69	7.77	(3.74)	17.29	18.74	(14.44)	40.69	11.17	12.98	3.46	7.05	08/01/2005
	ESTIMATED INVESTMENT FEES			(0.01)	(0.03)	(0.01)	(0.02)	(0.02)	(0.03)	0.01	(0.03)	(0.02)	(0.04)			
	FOVSF-TOTAL EMERGING MARKETS - NET MGR			4.90	40.66	7.76	(3.76)	17.27	18.72	(14.44)	40.66	11.14	12.94			
	MSCI EMERGING MARKETS			5.05	40.90	7.45	(3.39)	18.31	18.42	(14.57)	40.90	11.27	13.03	4.28	7.81	
	EXCESS RETURN			(0.14)	(0.24)	0.31	(0.37)	(1.04)	0.29	0.13	(0.24)	(0.13)	(0.09)	(0.82)	(0.76)	

Consolidated Performance Report



Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE 2020	CYE 2020	CYE 2019	CYE 2018	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
FIXED INCOME RETURN DETAIL															
59 FOVSF-TOTAL FIXED INCOME - GROSS	133	32.12	1.88	(0.38)	(1.65)	8.79	7.64	8.51	(0.18)	(0.38)	5.30	3.41	4.14	5.82	08/01/1993
ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	0.01	(0.01)	(0.01)	(0.03)			
EST MANAGEMENT FEES			(0.00)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	0.01	(0.01)	(0.01)	(0.03)			
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
FOVSF-TOTAL FIXED INCOME - NET MGR			1.88	(0.39)	(1.66)	8.77	7.63	8.49	(0.17)	(0.39)	5.29	3.38			
67 FOVSF-TOTAL STRUCTURED - GROSS	129	31.24	1.93	(0.42)	(1.71)	8.87	7.72	8.76	(0.22)	(0.42)	5.40	2.98	4.10	5.58	09/01/2000
ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	0.01	(0.01)	(0.02)	(0.02)			
FOVSF-TOTAL STRUCTURED - NET MGR			1.92	(0.44)	(1.72)	8.85	7.70	8.75	(0.21)	(0.44)	5.38	2.96			
BLOOMBERG U.S. AGGREGATE			1.83	(0.33)	(1.60)	8.74	7.51	8.72	0.01	(0.33)	5.34	3.03	3.39	4.79	
EXCESS RETURN			0.09	(0.10)	(0.11)	0.11	0.19	0.03	(0.22)	(0.10)	0.04	(0.07)	0.71	0.78	
CASH SUMMARY															
79 Short Term FOVSF - GROSS	4	0.87	0.12	(0.11)	0.15	1.17	0.02	2.09	1.62	(0.11)	1.10				01/01/1988
ESTIMATED INVESTMENT FEES			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
Short Term FOVSF - NET MGR			0.12	(0.11)	0.15	1.17	0.02	2.09	1.62	(0.11)	1.10				
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 June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
EQUITY SUMMARY										
US EQUITY										
BlackRock US SCG R2000	6	1.45	3.91	51.45	9.30	34.42	28.39	(9.14)	22.26	11.29
RUSSELL 2000 GROWTH DAILY			3.92	51.36	8.98	34.63	28.48	(9.31)	22.17	11.32
Excess			(0.01)	0.09	0.32	(0.21)	(0.09)	0.17	0.09	(0.02)
BlackRock US SCV R2000	6	1.54	4.48	73.35	26.57	4.87	22.60	(12.79)	7.34	31.71
RUSSELL 2000 VALUE DAILY			4.56	73.28	26.69	4.63	22.39	(12.86)	7.84	31.74
Excess			(0.08)	0.07	(0.12)	0.24	0.20	0.08	(0.49)	(0.03)
BlackRock US LMC R1000 Core	147	35.56	8.53	43.06	14.98	20.89	31.37			
RUSSELL 1000 (DAILY)			8.54	43.07	14.95	20.96	31.43			
Excess			(0.01)	(0.01)	0.02	(0.08)	(0.06)			
NON - US EQUITY										
SSGA WorldxUS LMC NYC Custom IDX	78	18.94	5.77	34.00	10.07	8.09	22.75	(13.64)		
NYC Custom World ex US Index ^[1]			5.65	33.60	9.92	7.59	22.49	(14.09)		
Excess			0.13	0.40	0.15	0.50	0.26	0.45		
SSGA WORLD EX USA SMALL CAP ^[2]	14	3.28	4.90	42.47	10.03	13.16	25.67	(17.97)		
World ex USA SC PASSIVE CUSTOM BM ^[3]			4.81	42.28	9.92	12.78	25.41	(18.07)		
Excess			0.09	0.19	0.11	0.37	0.26	0.10		
EMERGING MARKETS										
BlackRock MSCI EM Core	29	7.11	4.90	40.66	7.76	17.27	18.76	(14.44)	37.26	11.19
MSCI EMERGING MARKETS			5.05	40.90	7.45	18.31	18.42	(14.57)	37.28	11.19
Excess			(0.14)	(0.24)	0.31	(1.04)	0.34	0.13	(0.02)	0.01



Net Returns Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
FIXED INCOME SUMMARY										
STRUCTURED FIXED INCOME										
SSGA-Core US Agg	129	31.24	1.92	(0.44)	(1.72)	7.70	8.75	(0.24)		
Bloomberg U.S. Aggregate			1.83	(0.33)	(1.60)	7.51	8.72	0.01		
Excess			0.09	(0.10)	(0.11)	0.19	0.03	(0.25)		
CASH										
Short Term FOVSF	4	0.87	0.12	(0.11)	0.15	0.02	2.09	1.62		0.48
ICE BofA US 3-Month Treasury Bill			(0.00)	0.09	0.02	0.67	2.28	1.87		0.33
Excess			0.12	(0.21)	0.13	(0.65)	(0.19)	(0.25)		0.16
Cash Account	0	0.00								
Securities Lending	0	0.00								



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

Appendix C

Footnotes



Through June 30, 2021

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.
- Returns over 1 year are annualized.

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.



Through June 30, 2021

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: Bloomberg Aggregate * 35.00%*

*TIPS: Bloomberg Global Inflation Linked US TIPS * 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.



Through June 30, 2021

[1] NYC Custom World ex US Index: Beginning 2.2017 benchmark changed from MSCI EAFE to MSCI World ex USA Net Index.

[2] Name changed from SSGA EAFE SC IDX 12.2017

[3] World ex USA SC PASSIVE CUSTOM BM: Beginning 12.2017 benchmark changed from MSCI EAFE Small Cap Net to MSCI World ex US Small Cap (Net).



New York City
Firefighters' Variable Supplements Fund
Performance Overview as of June 30, 2021

Total Fund Overview



New York City Firefighters' Variable Supplements Fund

Table of Contents:

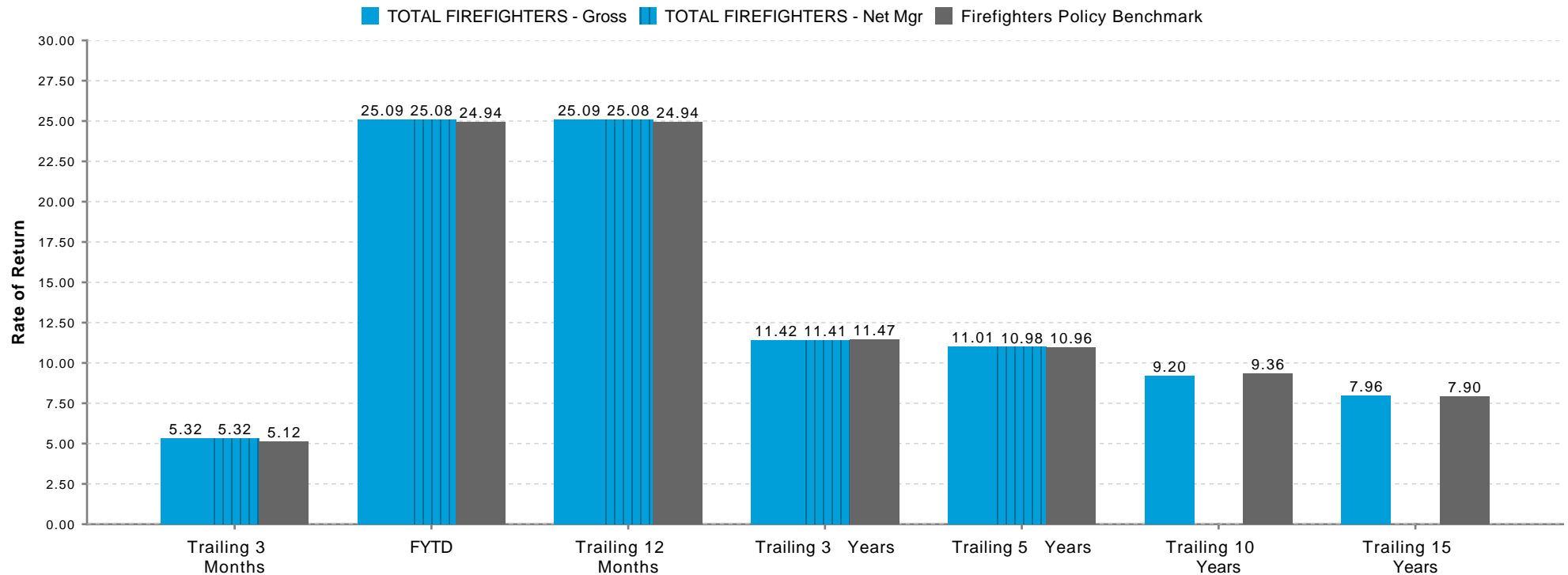
Performance Charts	p.3
Appendix A - Consolidated Performance Report	p.10
Appendix B - Public Markets Manager Performance Detail	p.14
Appendix C - Footnotes	p.17



TOTAL FIREFIGHTERS

Market Value (Millions)

\$567.5



	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 FIREFIGHTERS	11.7	12.1	11.0	9.8	9.3	9.5	9.3	9.5

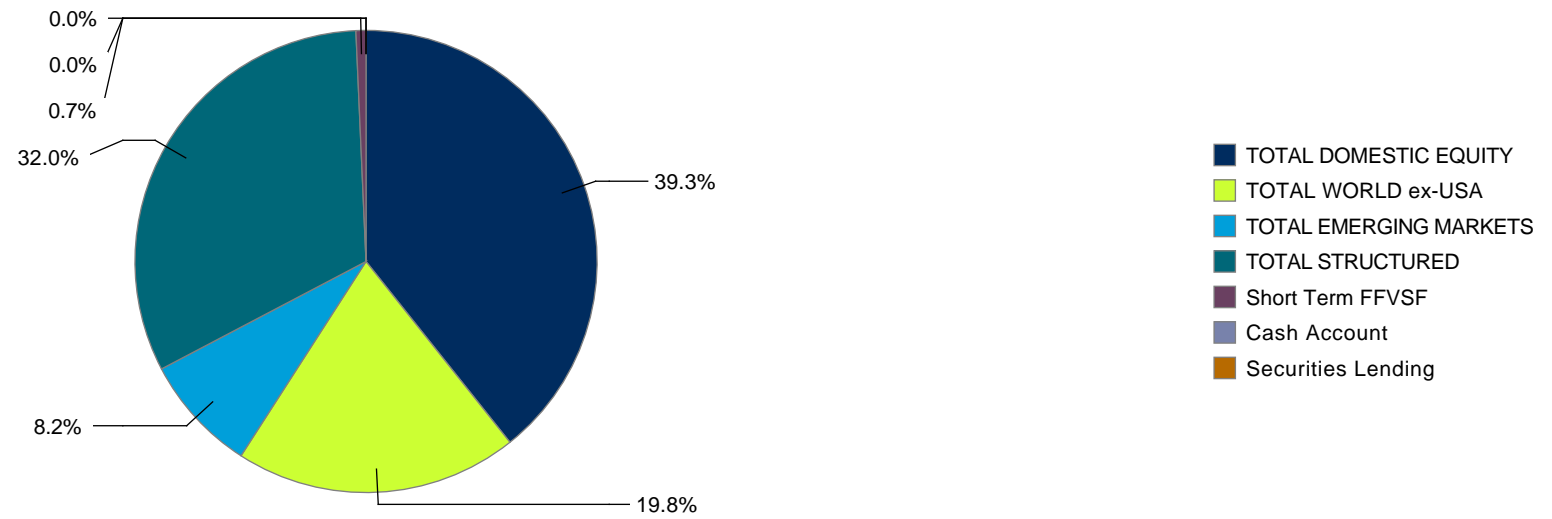


Market Value (Millions)

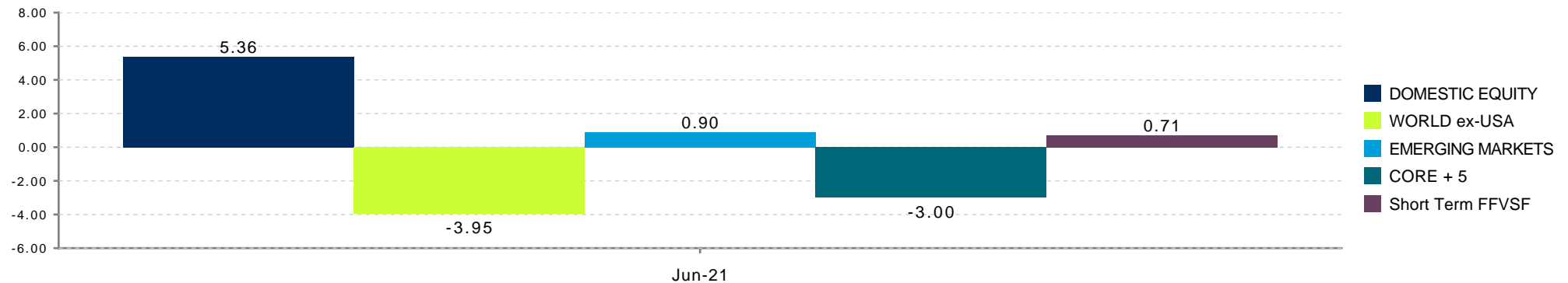
\$567.5

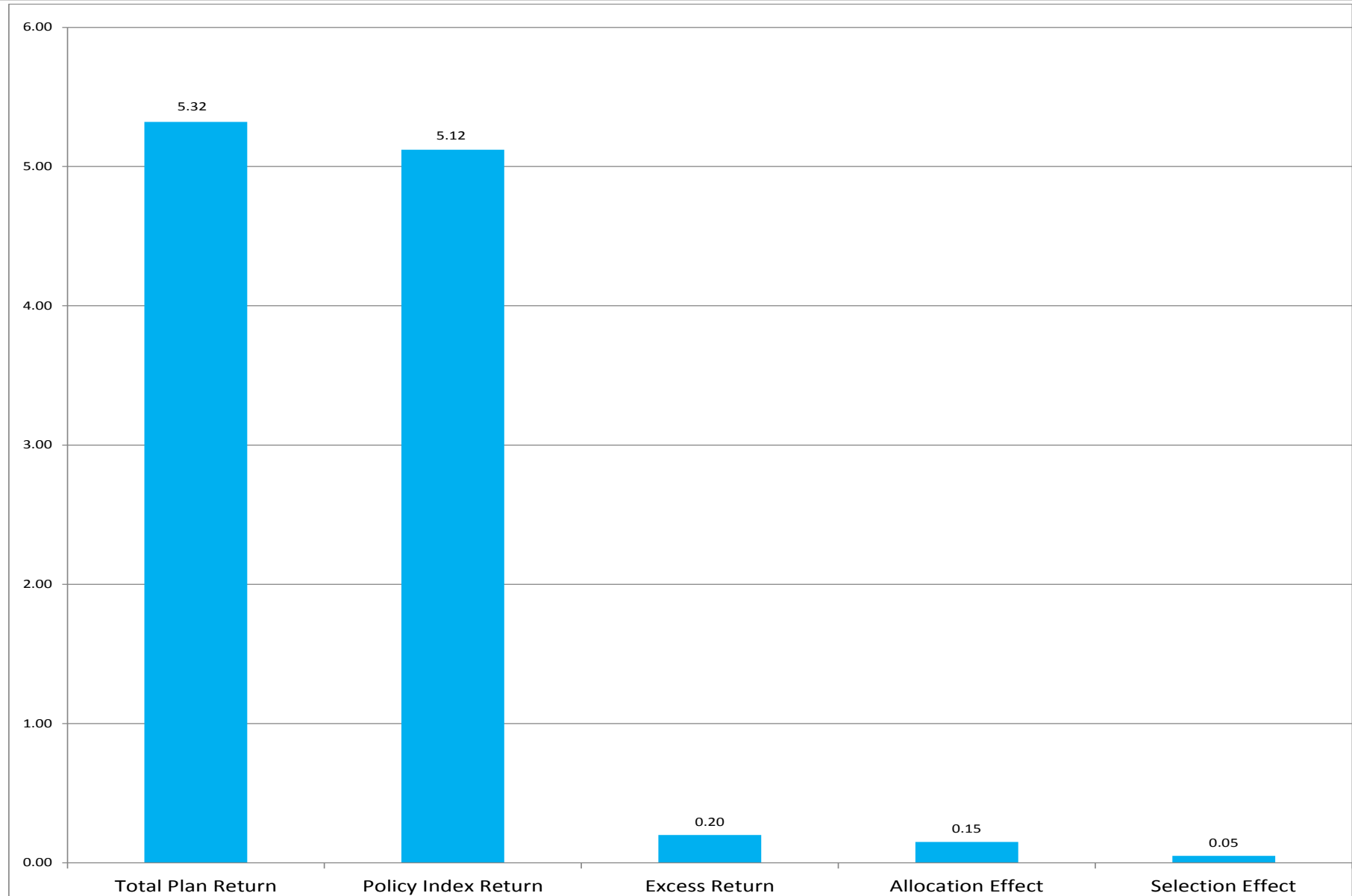
TOTAL FIREFIGHTERS

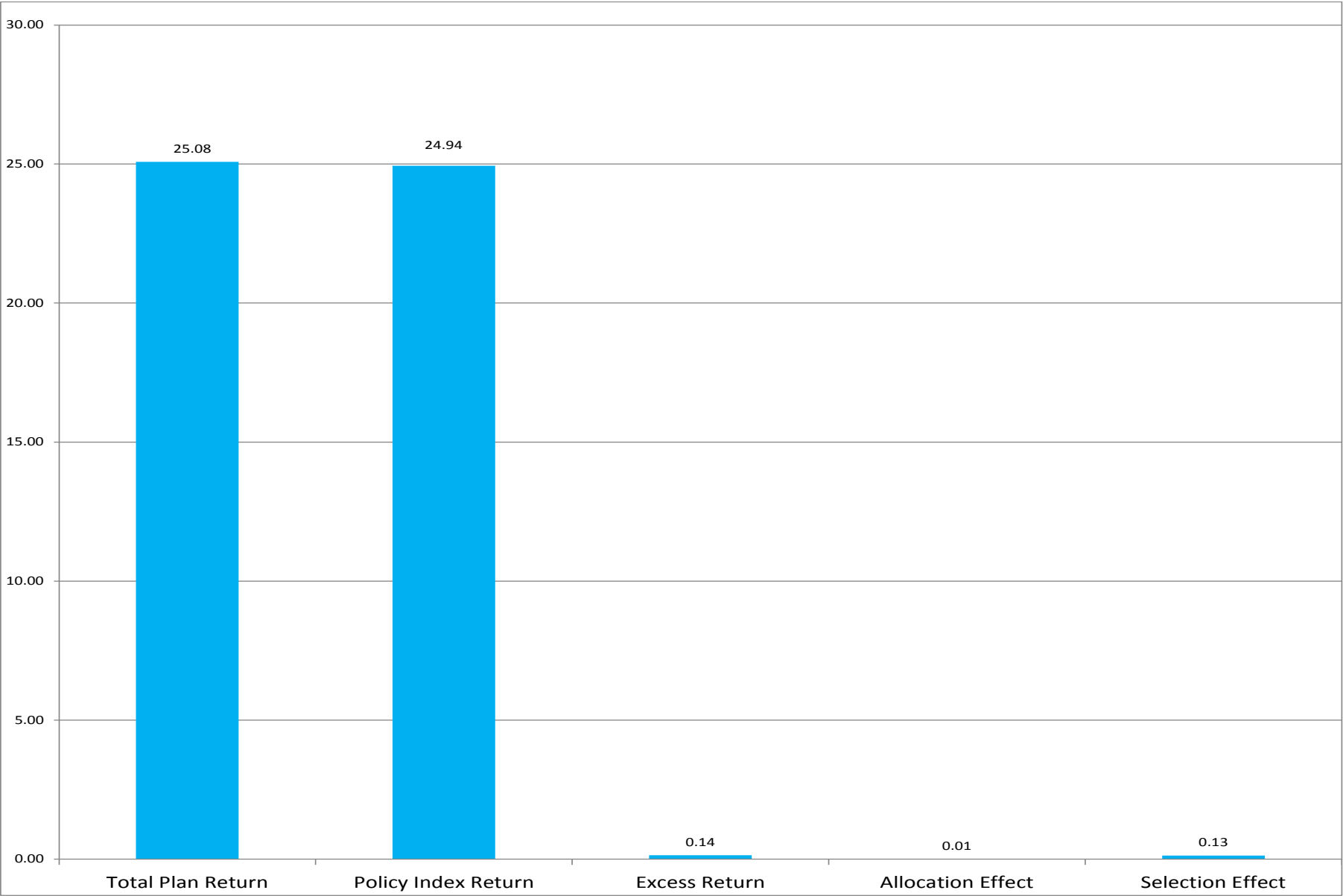
Asset Allocation

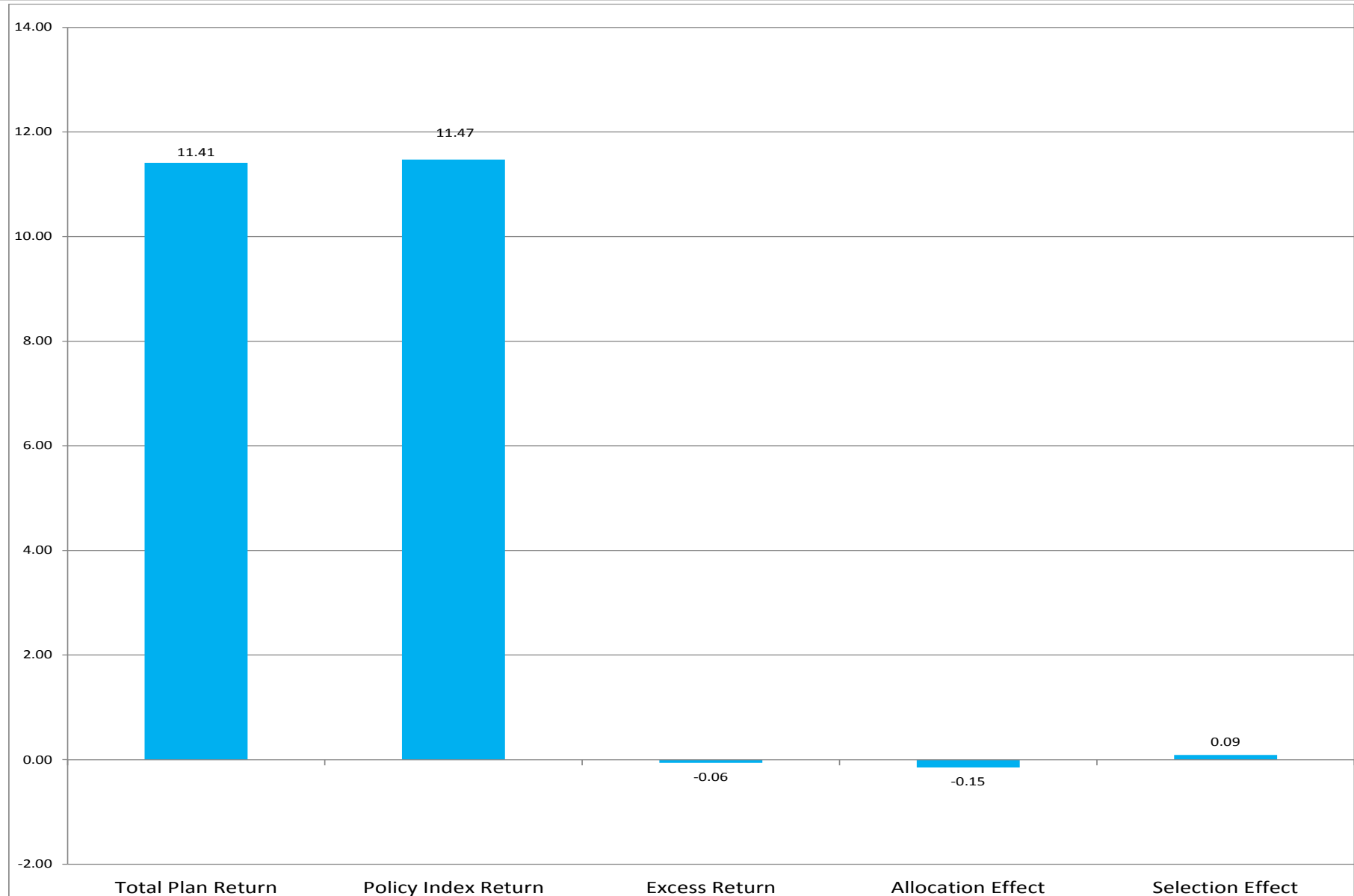


Relative Mix to Asset Weights











Allocation Effect - Asset Class Breakdown				
	<u>Quarter</u>	<u>FYTD</u>	<u>3 Years</u>	<u>Benchmark</u>
TOTAL FIREFIGHTERS	0.15	0.01	-0.15	Firefighters Policy Benchmark
TOTAL DOMESTIC EQUITY	0.14	0.54	0.10	RUSSELL 3000
TOTAL WORLD ex-USA EQUITY	-0.03	-0.37	0.00	MSCI World ex USA IMI Net
TOTAL EMERGING MARKETS	0.00	0.04	-0.01	MSCI EMERGING MARKETS
TOTAL STRUCTURED	0.07	-0.06	-0.20	Bloomberg Aggregate
TOTAL CASH	-0.03	-0.14	-0.05	

Selection Effect - Asset Class Breakdown				
	<u>Quarter</u>	<u>FYTD</u>	<u>3 Years</u>	<u>Benchmark</u>
TOTAL FIREFIGHTERS	0.05	0.13	0.09	Firefighters Policy Benchmark
TOTAL DOMESTIC EQUITY	0.01	0.05	-0.03	RUSSELL 3000
TOTAL WORLD ex-USA EQUITY	0.03	0.10	0.09	MSCI World ex USA IMI Net
TOTAL EMERGING MARKETS	-0.01	0.01	0.01	MSCI EMERGING MARKETS
TOTAL STRUCTURED	0.03	-0.02	0.02	Bloomberg Aggregate
TOTAL CASH	0.00	0.00	0.00	



NYC FIRE FIGHTERS' VARIABLE SUPPLEMENTS FUND SECURITIES LENDING INCOME

June 30, 2021

	U. S. FIXED INCOME	U. S. EQUITY	INTERNATIONAL EQUITY	TOTAL
2001	73,000	57,000	-	130,000
2002	34,000	36,000	-	70,000
2003	22,000	48,000	59,000	129,000
2004	45,000	93,000	45,000	183,000
2005	76,000	147,000	61,000	284,000
2006	79,000	192,000	63,000	334,000
2007	164,000	293,000	51,000	508,000
2008	451,000	492,000	65,000	1,008,000
2009	123,000	231,000	45,000	399,000
2010	49,000	204,000	31,000	284,000
2011	62,000	211,000	51,000	324,000
2012	60,000	201,000	36,000	297,000
2013	25,000	174,000	37,000	236,000
2014	6,800	18,000	133,000	157,800
2015	4,300	9,300	272,000	285,600
2016	11,000	159,000	205,000	375,000
2017	19,000	82,000	136,000	237,000
2018	8,674	42,245	142,702	193,621
2019	11,565	26,816	94,132	132,513
2020	21,844	23,735	71,690	117,269
2021 (6 months)	16,686	15,557	26,692	58,936
Since Inception	<u>1,362,869</u>	<u>2,755,654</u>	<u>1,625,215</u>	<u>5,743,738</u>



**New York City
Firefighters' Variable Supplements Fund**

Appendix A

Consolidated Performance Report

Consolidated Performance Report



Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE 2020	CYE 2020	CYE 2019	CYE 2018	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
SYSTEM RETURN SUMMARY															
5 FIREFIGHTERS-TOTAL PORTFOLIO - GROSS	567	100.00	5.32	25.09	7.59	4.11	13.51	20.00	(6.10)	25.09	11.42	11.01	9.20	8.86	01/01/1988
FIREFIGHTERS- ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.03)			
EST MANAGEMENT FEES			(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.03)			
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
FIREFIGHTERS-TOTAL PORTFOLIO - NET MGR			5.32	25.08	7.59	4.10	13.50	19.99	(6.11)	25.08	11.41	10.98			
FIREFIGHTERS POLICY BENCHMARK			5.12	24.94	7.32	4.30	13.79	20.32	(6.22)	24.94	11.47	10.96	9.36		
EXCESS RETURN			0.20	0.14	0.27	(0.20)	(0.29)	(0.33)	0.11	0.14	(0.06)	0.02	(0.16)		
EQUITY RETURN DETAIL															
17 FFVSF-TOTAL EQUITY - GROSS	382	67.30	7.06	41.13	12.68	1.34	16.46	26.85	(9.64)	41.13	14.58	14.74	11.63	8.10	08/01/2001
ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.03)			
EST MANAGEMENT FEES			(0.00)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.03)			
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
FFVSF-TOTAL EQUITY - NET MGR			7.06	41.12	12.67	1.33	16.45	26.84	(9.65)	41.12	14.57	14.71			
25 FFVSF-TOTAL DOMESTIC EQUITY - GROSS	223	39.26	8.26	44.28	15.12	6.22	20.80	30.77	(5.16)	44.28	18.62	17.85	14.69	10.97	06/01/1988
ESTIMATED INVESTMENT FEES			(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)			
FFVSF-TOTAL DOMESTIC EQUITY - NET MGR			8.26	44.27	15.12	6.21	20.80	30.77	(5.16)	44.27	18.62	17.85			
RUSSELL 3000 (DAILY)			8.24	44.16	15.11	6.53	20.89	31.02	(5.24)	44.16	18.73	17.89	14.70	11.27	
EXCESS RETURN			0.02	0.11	0.01	(0.32)	(0.09)	(0.25)	0.08	0.11	(0.11)	(0.04)	(0.01)	(0.29)	

Consolidated Performance Report



Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE 2020	CYE 2020	CYE 2019	CYE 2018	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
EQUITY RETURN DETAIL															
37 FFVSF-TOTAL WORLD ex-USA - GROSS	113	19.85	5.65	35.32	10.07	(4.79)	8.86	23.18	(14.41)	35.32	9.06	11.28	5.23	6.59	07/01/1994
ESTIMATED INVESTMENT FEES			(0.00)	(0.02)	(0.01)	(0.01)	(0.02)	(0.01)	(0.02)	(0.02)	(0.02)	(0.09)			
FFVSF-TOTAL WORLD ex-USA - NET MGR			5.65	35.29	10.06	(4.80)	8.85	23.17	(14.42)	35.29	9.04	11.19			
WORLD EX-USA CUSTOM BM			5.52	34.82	9.92	(5.11)	8.32	22.91	(14.68)	34.82	8.62	10.77	6.33	5.45	
EXCESS RETURN			0.13	0.48	0.15	0.31	0.52	0.26	0.26	0.48	0.43	0.43	(1.11)	1.14	
47 FFVSF-TOTAL EMERGING MARKETS - GROSS	47	8.20	4.91	40.69	7.77	(3.70)	17.29	18.79	(14.44)	40.69	11.18	12.99	3.47	7.00	08/01/2005
ESTIMATED INVESTMENT FEES			(0.01)	(0.03)	(0.01)	(0.02)	(0.02)	(0.03)	0.00	(0.03)	(0.02)	(0.04)			
FFVSF-TOTAL EMERGING MARKETS - NET MGR			4.90	40.66	7.76	(3.72)	17.27	18.76	(14.44)	40.66	11.16	12.94			
MSCI EMERGING MARKETS			5.05	40.90	7.45	(3.39)	18.31	18.42	(14.57)	40.90	11.27	13.03	4.28	7.81	
EXCESS RETURN			(0.14)	(0.24)	0.31	(0.33)	(1.04)	0.34	0.13	(0.24)	(0.12)	(0.08)	(0.81)	(0.80)	

Consolidated Performance Report



Through June 30, 2021

		Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE 2020	CYE 2020	CYE 2019	CYE 2018	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
FIXED INCOME RETURN DETAIL																
59	FFVSF-TOTAL FIXED INCOME - GROSS	186	32.70	1.89	(0.39)	(1.66)	8.73	7.57	8.60	(0.16)	(0.39)	5.31	3.59	4.04	6.43	05/01/1988
	ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.01)	(0.01)	(0.02)	(0.03)			
	EST MANAGEMENT FEES			(0.00)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.01)	(0.01)	(0.02)	(0.03)			
	EST INCENTIVE FEES															
	EST OTHER FEES															
	EST FEE OFFSETS															
	FFVSF-TOTAL FIXED INCOME - NET MGR			1.89	(0.41)	(1.67)	8.71	7.56	8.58	(0.18)	(0.41)	5.29	3.55			
67	FFVSF-TOTAL STRUCTURED - GROSS	182	32.00	1.93	(0.42)	(1.71)	8.85	7.72	8.74	(0.22)	(0.42)	5.39	3.20	3.92	5.34	09/01/2000
	ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)			
	FFVSF-TOTAL STRUCTURED - NET MGR			1.92	(0.44)	(1.72)	8.83	7.70	8.72	(0.24)	(0.44)	5.38	3.17			
	BLOOMBERG U.S. AGGREGATE			1.83	(0.33)	(1.60)	8.74	7.51	8.72	0.01	(0.33)	5.34	3.03	3.39	4.79	
	EXCESS RETURN			0.09	(0.10)	(0.11)	0.09	0.19	0.01	(0.25)	(0.10)	0.03	0.15	0.52	0.55	
CASH SUMMARY																
79	Short Term FFVSF - GROSS	4	0.71	0.15	0.14	0.18	1.33	0.38	2.10	1.51	0.14	1.25				01/01/1988
	ESTIMATED INVESTMENT FEES			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	Short Term FFVSF - NET MGR			0.15	0.14	0.18	1.33	0.38	2.10	1.51	0.14	1.25				
83	Cash Account	0	0.00													
85	Securities Lending	0	0.00													



**New York City
Firefighters' Variable Supplements Fund**

Appendix B

Public Markets Manager Performance Detail

Public Markets Manager Performance Detail



Net Returns Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
EQUITY SUMMARY										
US EQUITY										
BlackRock US SCG R2000	7	1.18	3.91	51.45	9.30	34.42	28.39	(9.14)	22.26	11.29
RUSSELL 2000 GROWTH DAILY			3.92	51.36	8.98	34.63	28.48	(9.31)	22.17	11.32
Excess			(0.01)	0.09	0.32	(0.21)	(0.09)	0.17	0.09	(0.02)
BlackRock US SCV R2000	7	1.21	4.48	73.35	26.57	4.87	22.60	(12.79)	7.34	31.71
RUSSELL 2000 VALUE DAILY			4.56	73.28	26.69	4.63	22.39	(12.86)	7.84	31.74
Excess			(0.08)	0.07	(0.12)	0.24	0.20	0.08	(0.49)	(0.03)
BlackRock US LMC R1000 Core	209	36.87	8.52	42.99	14.94	20.92	31.26			
RUSSELL 1000 (DAILY)			8.54	43.07	14.95	20.96	31.43			
Excess			(0.01)	(0.08)	(0.01)	(0.05)	(0.17)			
NON - US EQUITY										
SSGA WorldxUS LMC NYC Custom IDX	96	16.98	5.77	34.01	10.07	8.09	22.75	(13.64)		
NYC Custom World ex US Index ^[1]			5.65	33.60	9.92	7.59	22.49	(14.09)		
Excess			0.13	0.40	0.15	0.50	0.26	0.45		
SSGA WORLD EX USA SMALL CAP ^[2]	16	2.87	4.90	42.47	10.03	13.16	25.67	(17.97)		
World ex USA SC PASSIVE CUSTOM BM ^[3]			4.81	42.28	9.92	12.78	25.41	(18.07)		
Excess			0.09	0.19	0.11	0.38	0.26	0.10		
EMERGING MARKETS										
BlackRock MSCI EM Core	47	8.20	4.90	40.66	7.76	17.27	18.76	(14.44)	37.26	11.19
MSCI EMERGING MARKETS			5.05	40.90	7.45	18.31	18.42	(14.57)	37.28	11.19
Excess			(0.14)	(0.24)	0.31	(1.04)	0.34	0.13	(0.03)	0.00



Net Returns Through June 30, 2021

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2020	2019	2018	2017	2016
FIXED INCOME SUMMARY										
STRUCTURED FIXED INCOME										
SSGA-Core US Agg	182	32.00	1.92	(0.44)	(1.72)	7.70	8.72	(0.25)		
Bloomberg U.S. Aggregate			1.83	(0.33)	(1.60)	7.51	8.72	0.01		
Excess			0.09	(0.10)	(0.11)	0.19	0.01	(0.26)		
CASH										
Short Term FFVSF	4	0.71	0.15	0.14	0.18	0.38	2.10	1.51		0.79
ICE BofA US 3-Month Treasury Bill			(0.00)	0.09	0.02	0.67	2.28	1.87		0.33
Excess			0.15	0.05	0.15	(0.29)	(0.18)	(0.37)		0.46
Cash Account	0	0.00								
Securities Lending	0	0.00								



**New York City
Firefighters' Variable Supplements Fund**

Appendix C

Footnotes



Through June 30, 2021

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.
- Returns over 1 year are annualized.

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.



Through June 30, 2021

The indexes and most recent policy weights are as follows:

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

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

*Domestic Fixed Income: Bloomberg Aggregate * 35.00%*

*TIPS: Bloomberg Global Inflation Linked US TIPS * 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.



Through June 30, 2021

[1] NYC Custom World ex US Index: Beginning 2.2017 benchmark changed from MSCI EAFE to MSCI World ex USA Net Index.

[2] Name changed from SSGA EAFE SC IDX 12.2017

[3] World ex USA SC PASSIVE CUSTOM BM: Beginning 12.2017 benchmark changed from MSCI EAFE Small Cap Net to MSCI World ex US Small Cap (Net).

ETI Quarterly Report (Public):

Fire Pension Fund - Economically Targeted Investments Quarterly Report

Public/Private Apartment Rehabilitation Program (PPAR)

Lenders	Bank of America		Citi Community Development		Carver Federal Savings Bank		The Community Preservation Corp		JP Morgan Chase		Low Income Investment Fund		NCB Capital Impact		Neighborhood Housing Service		Wells Fargo		Local Initiatives Support Corp		Bellwether Enterprise		NYC HDC	
Contractual Commitment	\$11.00		\$6.00		\$1.00		\$6.00		\$10.00		\$6.00		\$1.00		\$1.00		\$3.00		\$7.00		\$7.00		\$5.00	
Current Market Value	\$2.96		\$4.66		\$0.42		\$2.49		\$6.56		\$3.32		\$0.25		\$0.00		\$1.02		\$2.01		\$1.55		\$0.00	
	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units
<u>Commitments Q2 (included in total)</u>																								
Bronx	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0
Brooklyn	0.00	0	0.00	0	0.00	0	0.03	58	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Manhattan	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Queens	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Staten Island	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Outside of NYC	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Total	\$0.00	0	\$0.00	0	\$0.00	0	\$0.03	58	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0
<u>Delivered Q2 (included in total)</u>																								
Bronx	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0
Brooklyn	0.00	0	0.00	0	0.00	0	0.04	81	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Manhattan	0.00	0	0.00	0	0.00	0	0.04	77	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Queens	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Staten Island	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Outside of NYC	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Total	\$0.00	0	\$0.00	0	\$0.00	0	\$0.09	158	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0
<u>Total Commitments</u>																								
Bronx	\$0.00	0	\$0.00	0	\$0.00	0	\$1.03	1,236	\$0.85	178	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$1.68	90	\$0.75	101	\$0.00	0
Brooklyn	0.00	0	0.16	0	0.00	0	0.22	552	0.10	67	0.26	95	0.00	0	0.00	0	0.37	130	0.59	74	0.00	0	0.00	0
Manhattan	0.00	0	0.00	0	0.00	0	0.24	268	0.07	28	0.66	174	0.00	0	0.00	0	0.00	0	1.65	65	0.00	0	0.00	0
Queens	0.00	0	0.00	0	0.00	0	0.13	152	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Staten Island	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Outside of NYC	0.00	0	0.00	0	0.00	0	0.17	259	0.25	74	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Total	\$0.00	0	\$0.16	0	\$0.00	0	\$1.78	2,467	\$1.26	347	\$0.92	269	\$0.00	0	\$0.00	0	\$0.37	130	\$3.92	229	\$0.75	101	\$0.00	0
<u>Historical Investments</u>																								
Bronx	\$0.61	60	\$2.14	802	\$0.00	0	\$0.82	1,765	\$4.61	1,623	\$0.74	178	\$0.00	0	\$0.00	0	\$0.17	90	\$0.75	48	\$0.00	0	\$0.00	0
Brooklyn	0.65	54	1.42	481	0.00	0	1.09	1,773	0.56	226	1.20	401	0.00	0	0.00	0	0.00	0	1.09	82	1.46	360	0.00	0
Manhattan	0.78	100	0.56	283	0.54	236	0.59	1,328	0.55	333	1.58	407	0.27	123	0.00	0	0.72	203	0.00	0	0.00	0	0.00	0
Queens	1.97	293	0.12	54	0.00	0	0.02	38	0.46	164	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Staten Island	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.05	67	0.00	0	0.00	0	0.00	0
Outside of NYC	0.21	39	0.32	41	0.00	0	0.45	527	0.39	123	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Total	\$4.22	546	\$4.55	1,661	\$0.54	236	\$2.97	5,431	\$6.55	2,469	\$3.52	986	\$0.27	123	\$0.00	0	\$0.95	360	\$1.84	130	\$1.46	360	\$0.00	0

Note: Dollar amount listed in millions

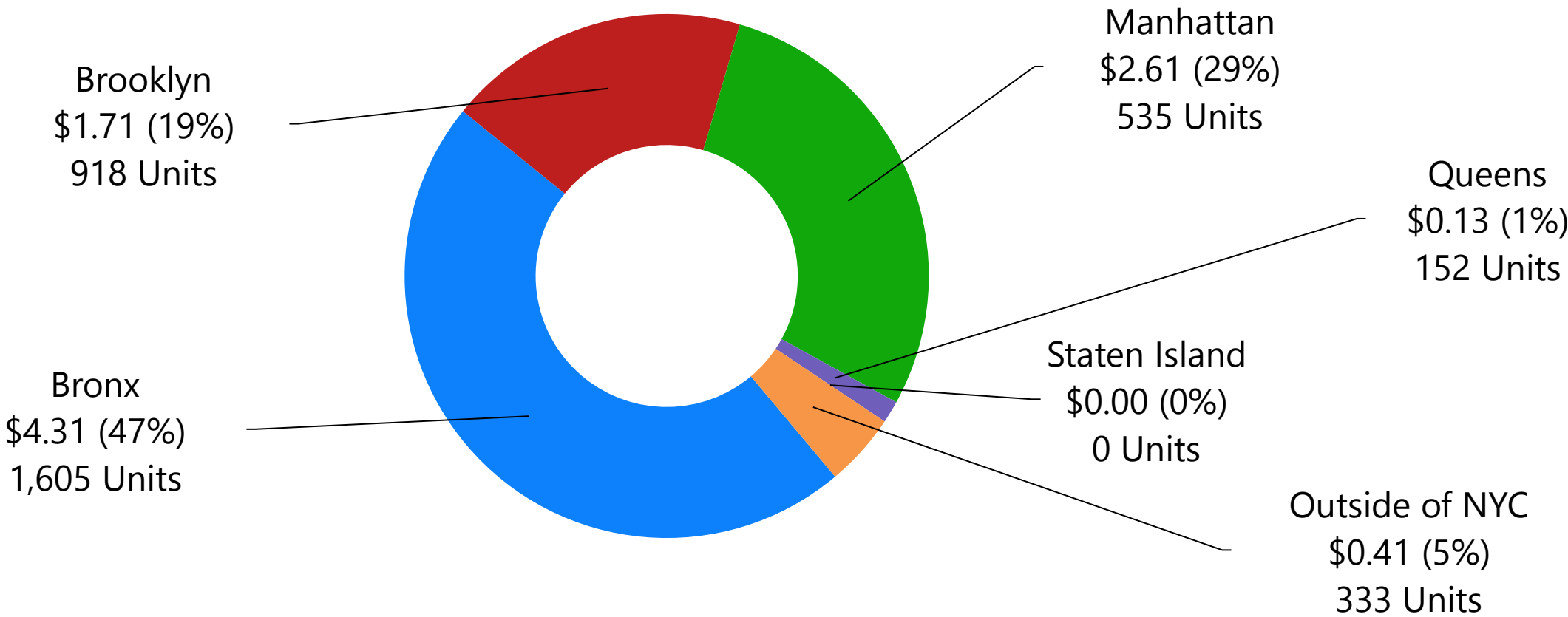
Fire Pension Fund - Economically Targeted Investments Quarterly Report

Public/Private Apartment Rehabilitation Program (PPAR)

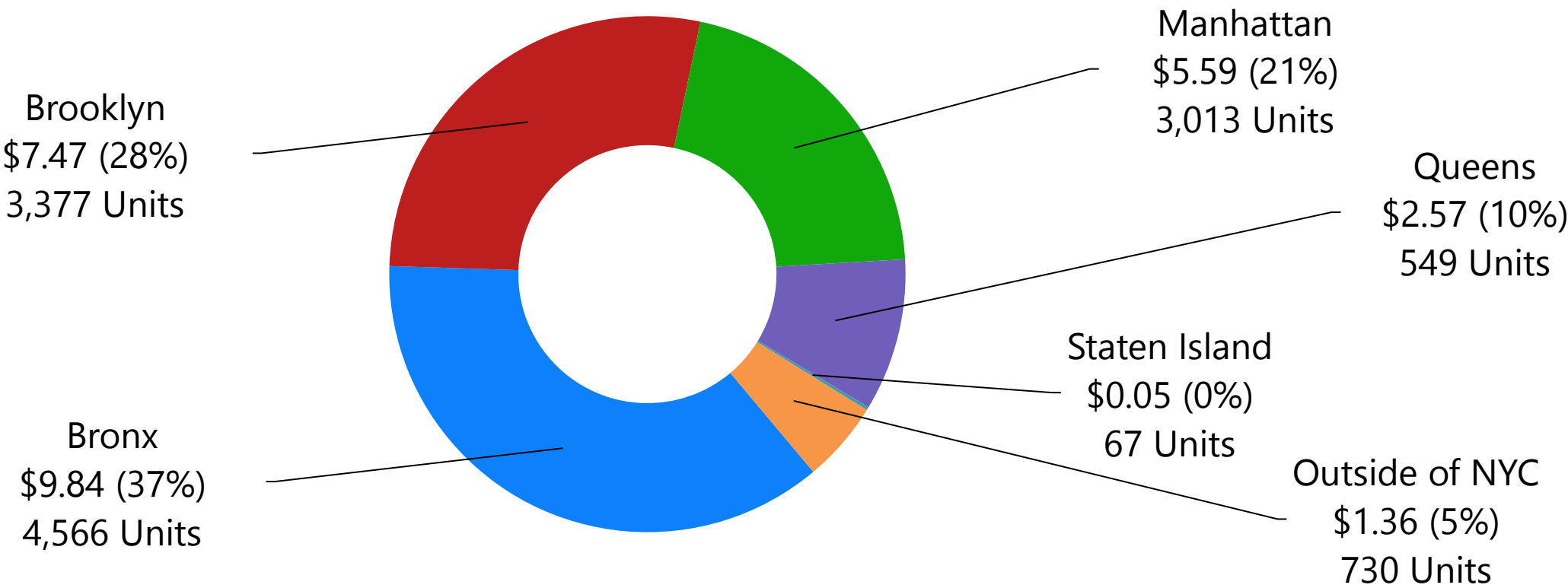
Lenders	All Lender Totals	
Contractual Commitment	\$64.00	
Current Market Value	\$25.24	
	Dollars	Units
Commitments Q2 (included in total)		
Bronx	\$0.00	0
Brooklyn	0.03	58
Manhattan	0.00	0
Queens	0.00	0
Staten Island	0.00	0
Outside of NYC	0.00	0
Total	\$0.03	58
Delivered Q2 (included in total)		
Bronx	\$0.00	0
Brooklyn	0.04	81
Manhattan	0.04	77
Queens	0.00	0
Staten Island	0.00	0
Outside of NYC	0.00	0
Total	\$0.09	158
Total Commitments		
Bronx	\$4.31	1,605
Brooklyn	1.71	918
Manhattan	2.61	535
Queens	0.13	152
Staten Island	0.00	0
Outside of NYC	0.41	333
Total	\$9.17	3,543
Historical Investments		
Bronx	\$9.84	4,566
Brooklyn	7.47	3,377
Manhattan	5.59	3,013
Queens	2.57	549
Staten Island	0.05	67
Outside of NYC	1.36	730
Total	\$26.88	12,302

Note: Dollar amount listed in millions

Current Commitments All PPAR Lenders



Historical Investments Since Inception All PPAR Lenders



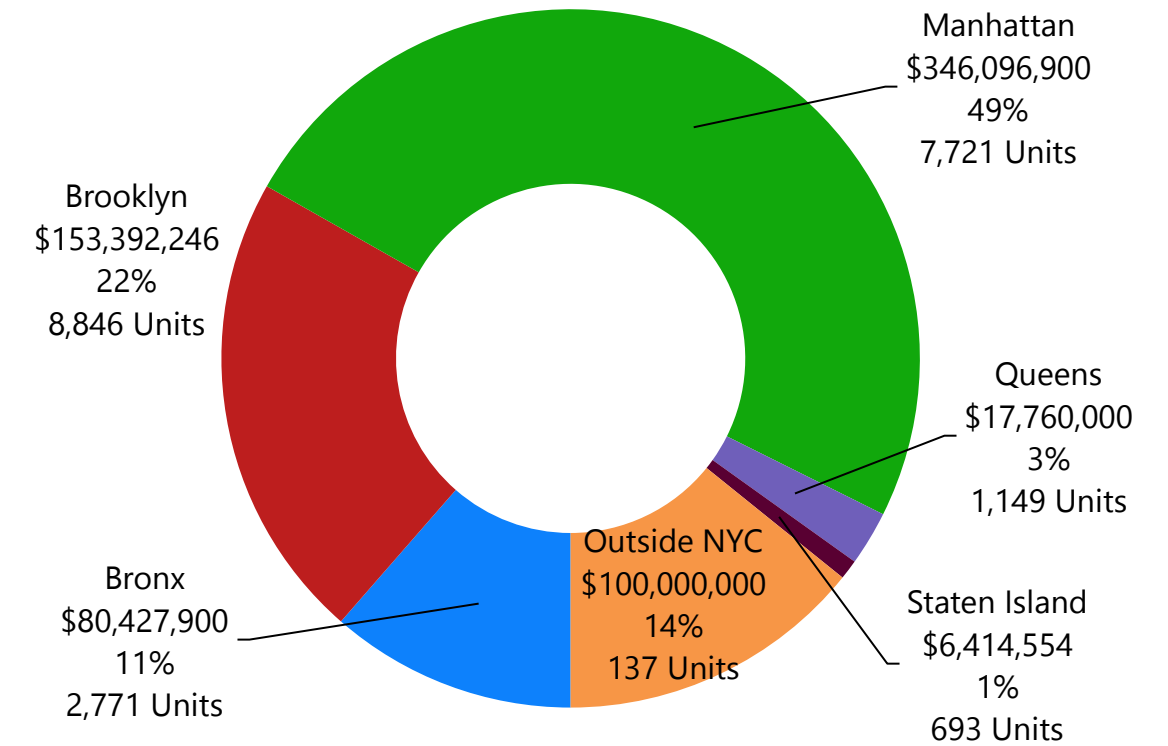
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AFL-CIO Housing Investment Trust (HIT) Market Value \$63.10 million¹

NYC Community Investment Initiative (NYCCII)

Borough	NYCCII Phase I: 2002 - 2005		NYCCII Phase II: 2006 - 2013		Grand Total	
	Investments	Units ²	Investments	Units ²	Investments	Units ²
Bronx	\$27,600,000	2,010	\$52,827,900	761	\$80,427,900	2,771
Brooklyn	49,501,800	3,230	103,890,446	5,616	153,392,246	8,846
Manhattan	172,021,700	6,908	174,075,200	813	346,096,900	7,721
Queens	0	0	17,760,000	1,149	17,760,000	1,149
Staten Island	0	0	6,414,554	693	6,414,554	693
Outside NYC	0	0	100,000,000	137	100,000,000	137
Total	\$249,123,500	12,148	\$454,968,100	9,169	\$704,091,600	21,317

NYCCII Multifamily Program



HIT Home Mortgage Program

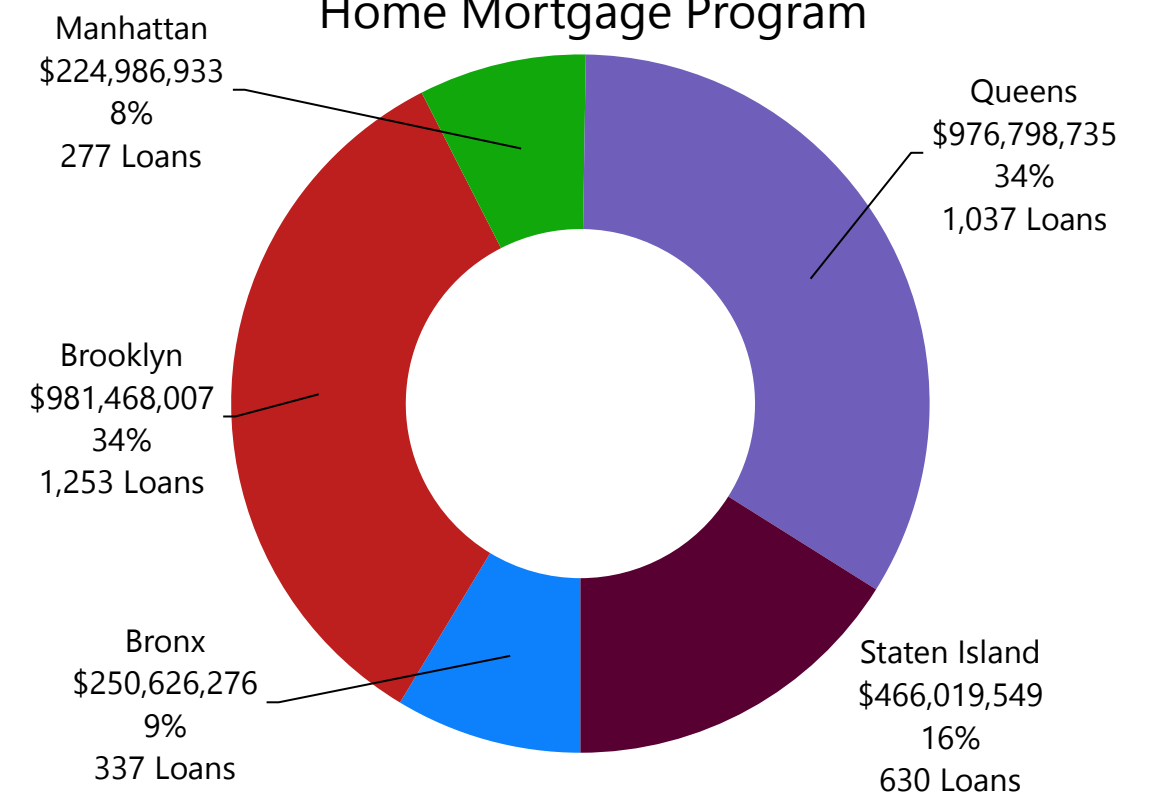
Borough	NYCCII Phase I: 2002 - 2005		NYCCII Phase II: 2006 - 2013		Grand Total	
	\$ Amount	Loans	\$ Amount	Loans	\$ Amount	Loans
Bronx	\$32,544,168	41	\$218,082,108	296	\$250,626,276	337
Brooklyn	116,575,736	138	864,892,271	1,115	981,468,007	1,253
Manhattan	10,742,253	12	214,244,680	265	224,986,933	277
Queens	82,399,317	64	894,399,418	973	976,798,735	1,037
Staten Island	106,039,089	191	359,980,460	439	466,019,549	630
Total	\$348,300,563	446	\$2,551,598,937	3,088	\$2,899,899,500	3,534

FIRE Loans	Phase I:	48	Phase II:	133	Total:	181
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¹Interest is reinvested

²Low/Moderate Income Units

Home Mortgage Program



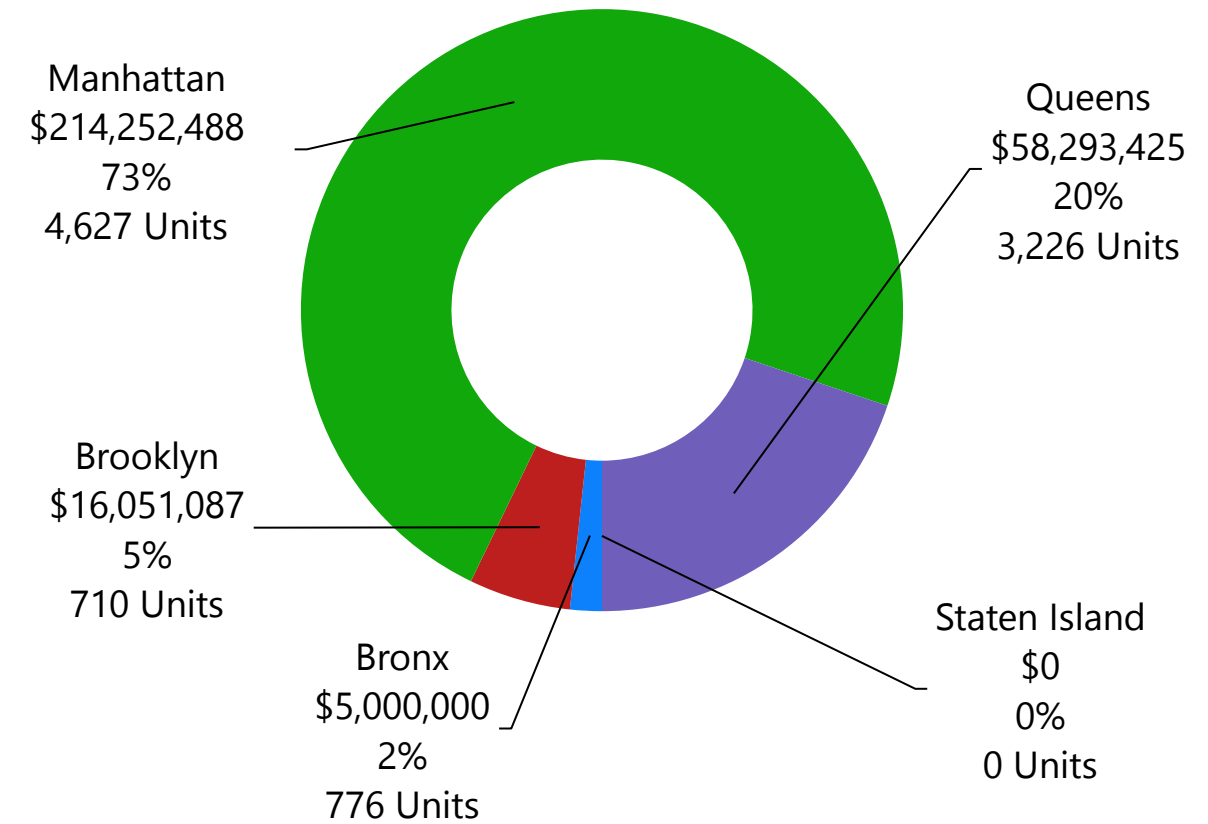
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AFL-CIO Housing Investment Trust (HIT)

NYC Workforce Housing Initiative: 2009 - 2015

Borough	Investments Since Inception	LMI Units Since Inception
Bronx	\$5,000,000	776
Brooklyn	16,051,087	710
Manhattan	214,252,488	4,627
Queens	58,293,425	3,226
Staten Island	0	0
Total	\$293,597,000	9,339

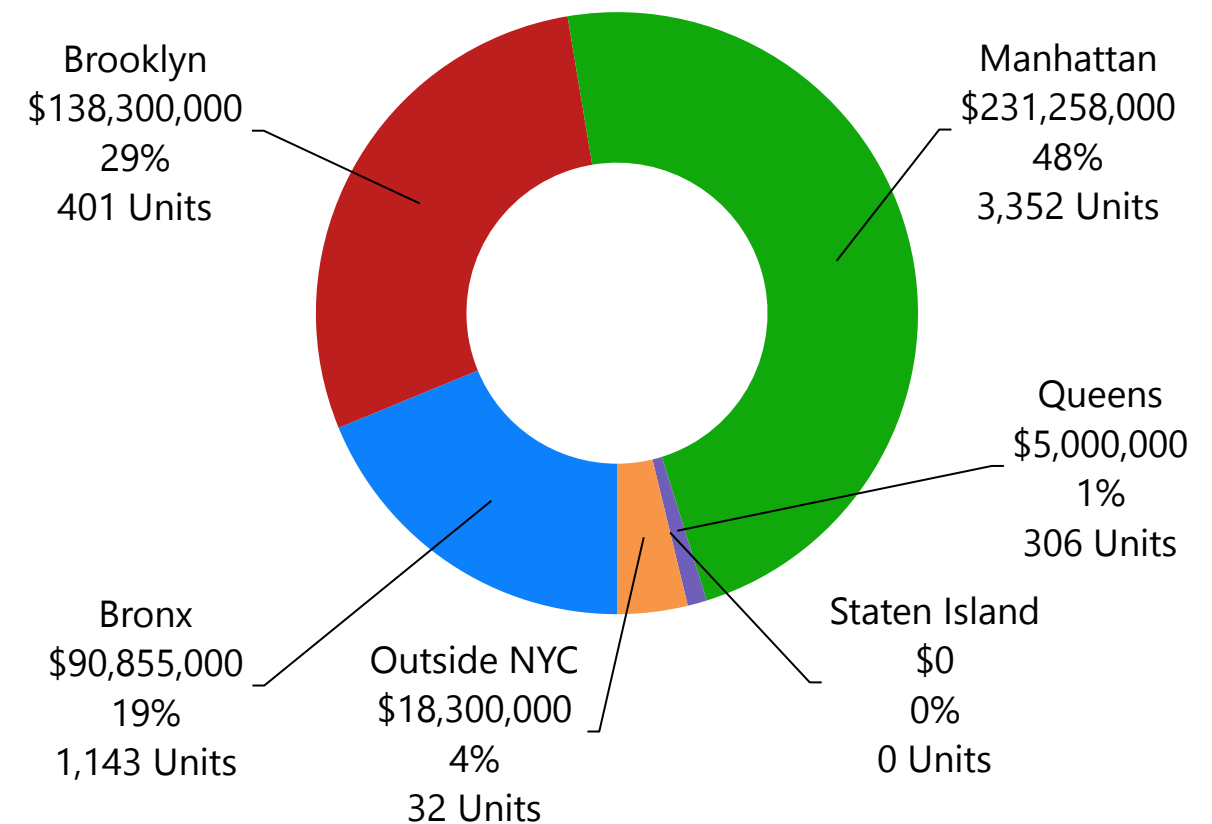
HIT Workforce Housing Initiative



HIT Housing Investment Strategy: 2015 - Q2 2021

Borough	Q2 Investments	Investments Since Inception	LMI Units Since Inception
Bronx	\$0	\$90,855,000	0
Brooklyn	0	138,300,000	0
Manhattan	3,800,000	231,258,000	110
Queens	0	5,000,000	0
Staten Island	0	0	0
Outside NYC	0	18,300,000	0
Total	\$3,800,000	\$483,713,000	110

HIT Housing Investment Strategy



Fire Pension Fund - Economically Targeted Investments Quarterly Report

RBC ACCESS CAPITAL STRATEGIES (Since Inception 2/1/07)

\$28.5 million Allocated (6.33% of total account)
Market Value \$29.08 million

Multifamily Investments Detail		\$ Invested ¹		Units ²	
	Q2	Total	Q2	Total	
Bronx	\$0	\$7,818,745	0	19,849	
Brooklyn	0	4,785,272	0	15,357	
Manhattan	0	7,943,164	0	7,281	
Queens	0	1,365,089	0	920	
Staten Island	0	352,718	0	75	
Total FIRE Multifamily Investments	\$0	\$22,264,988	0	43,482	
Multifamily Total All Systems	\$0	\$351,737,572	0	43,482	

Single Family Investments Detail		\$ Invested		Units	
	Q2	Total	Q2	Total	
Bronx	\$184,171	\$4,114,865	11	303	
Brooklyn	494,408	10,451,419	17	687	
Manhattan	31,853	891,660	2	59	
Queens	925,420	16,225,335	37	984	
Staten Island	484,114	10,589,082	21	648	
Total FIRE Single Family Investments	\$2,119,966	\$42,272,361	88	2,681	
Single Family Total All Systems	\$33,490,775	\$667,809,814	88	2,681	

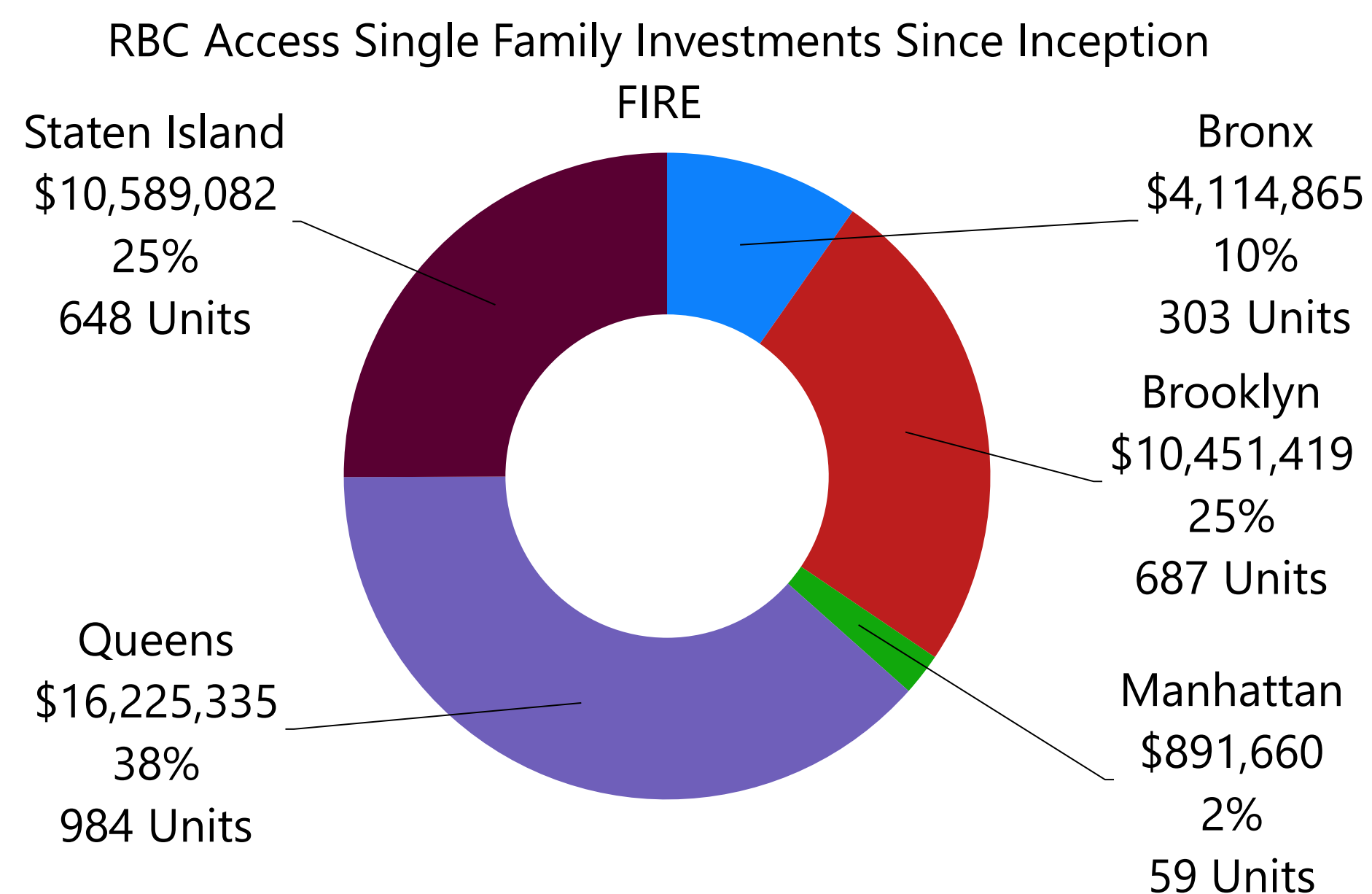
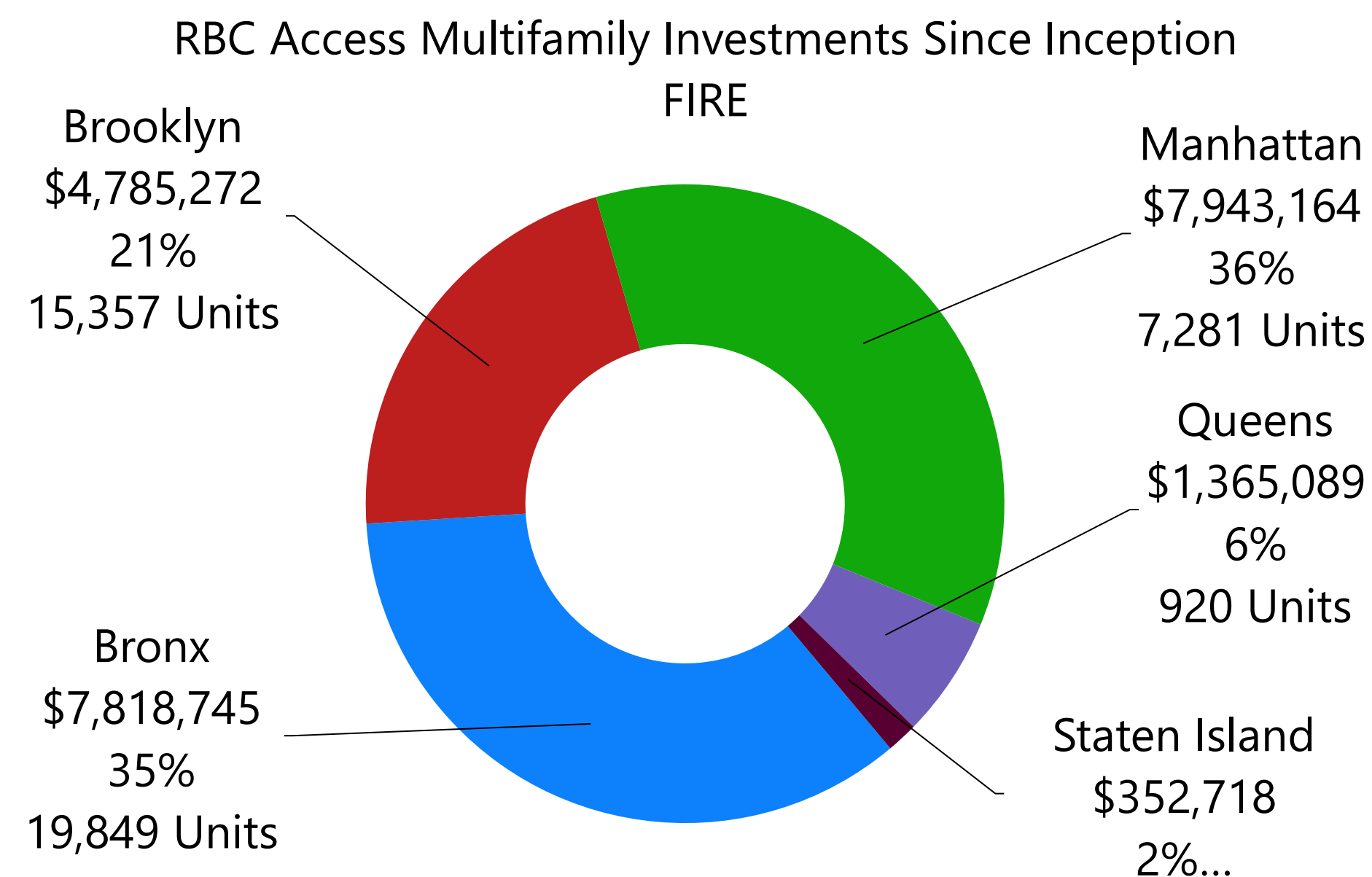
Other Investments Detail		\$ Invested		Loans	
	Q2	Total	Q2	Total	
Bronx	\$0	\$42,728	0	1	
Brooklyn	0	341,212	0	8	
Manhattan	0	154,003	0	5	
Queens	0	34,399	0	3	
Staten Island	0	0	0	0	
Total FIRE Other Investments	\$0	\$572,342	0	17	
Other Investments Total All Systems	\$0	\$9,041,740	0	17	

Grand Total FIRE	\$2,119,966	\$65,109,692
Grand Total All Systems	\$33,490,775	\$1,028,589,125

¹ Certain bond investment amounts are allocated pro rata across boroughs based upon unit count.

² If not indicated otherwise, superintendent units are allocated based on building size.

*On April 6, 2021, RBC purchased a security for settlement on April 14, 2021 in the amount of \$1,192,924 that included 4 mortgages that encumbered properties in Nassau, NY and Suffolk, NY. Although ETI is permitted to invest in the outer counties, RBC's investment guidelines require investments in New York City. RBC sold those mortgages on July 20, 2021 for settlement on July 23, 2021, resulting in a net gain of \$7,973.



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Equity Investments

Total Market Value \$14.35 million

Hudson Market Value \$4.50 million

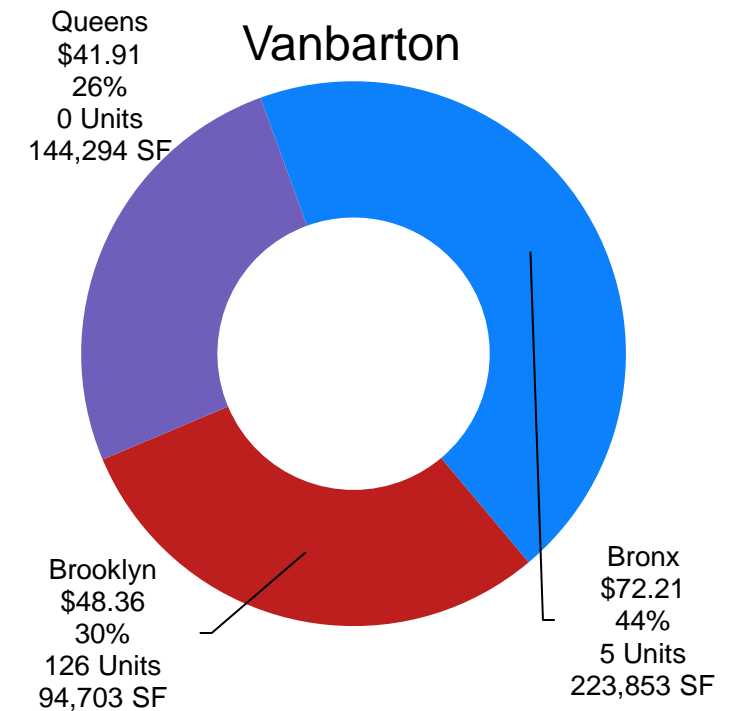
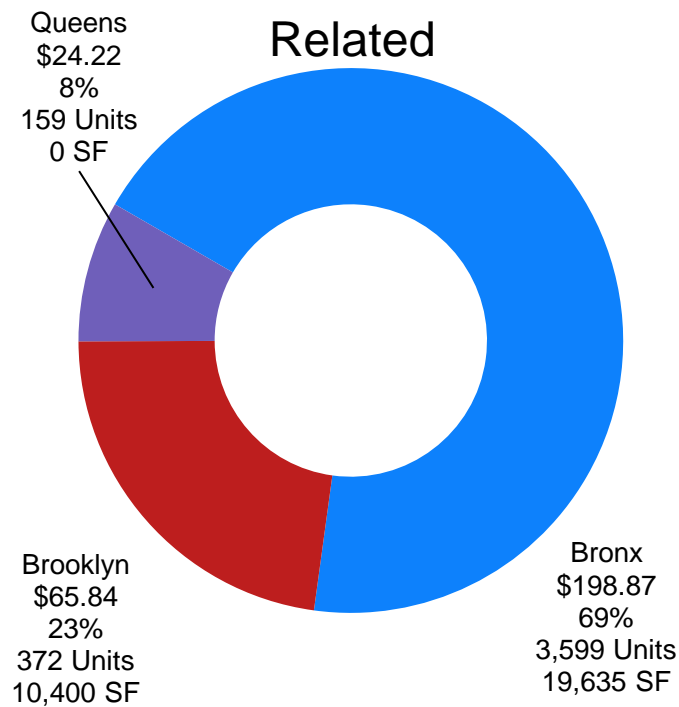
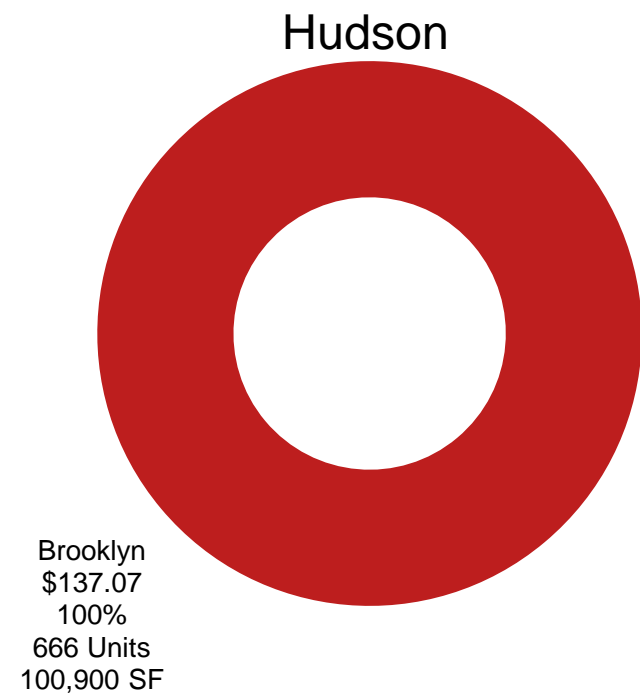
Borough	Gross Capital Invested	Total Units	Workforce Units	Comm. SF
Bronx	\$0.00	0	0	0
Brooklyn	137.07	666	666	100,900
Manhattan	0.00	0	0	0
Queens	0.00	0	0	0
Staten Island	0.00	0	0	0
Outside NYC	0.00	0	0	0
Totals	\$137.07	666	666	100,900

Related Market Value \$6.33 million

	Gross Capital Invested	Total Units	Workforce Units	Comm. SF
	\$198.87	3,599	3,356	19,635
	65.84	372	212	10,400
	0.00	0	0	0
	24.22	159	151	0
	0.00	0	0	0
	0.00	0	0	0
Totals	\$288.93	4,130	3,719	30,035

Vanbarton (Emmes) Market Value \$3.52 million

	Gross Capital Invested	Total Units	Workforce Units	Comm. SF
	\$72.21	5	2	223,853
	48.36	126	61	94,703
	0.00	0	0	0
	41.91	0	0	144,294
	0.00	0	0	0
	0.00	0	0	0
Totals	\$162.48	131	63	462,850



*All information is derived from quarterly reports submitted by individual managers. Performance has not been reviewed by consultants or custodial bank.

**Dollar amount listed in millions

Private Equity Quarterly Report (Public):



Private Equity Monitoring Report

For the period ended March 31, 2021

Report Prepared For:

New York City Fire Pension Fund



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An investment involves a number of risks and there are conflicts of interest.

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All data is as of March 31, 2021 unless otherwise noted.

PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS. ACTUAL PERFORMANCE MAY VARY.

I. Executive Summary

The New York City Fire Pension Fund (“NYCFPF”) established the Alternative Investment Program (the “Program”) on January 1, 1997 on behalf of its beneficiaries to participate in attractive long-term investment opportunities and to provide diversification to its overall pension investment portfolio.

StepStone Group LP (“StepStone”) was engaged by NYCFPF on February 1, 2012 to provide private equity advisory services for prospective investment opportunities and monitoring and reporting services for existing and new investments.

Since inception through March 31, 2021, the Program has committed US\$2.6 billion to 249 partnership investments (the “Portfolio”). This quarterly monitoring report covers the performance of the Portfolio as of March 31, 2021 as well as significant activity that occurred during the first quarter of 2021.

Performance Summary

US\$ in millions	March 31, 2021	December 31, 2020	March 31, 2020	Quarterly Change	Yearly Change
Number of Managers	125	125	122	-	3
Number of Investments	249	248	236	1	13
Committed Capital ¹	\$2,599.2	\$2,597.7	\$2,382.5	\$1.5	\$216.7
Contributed Capital	\$2,101.6	\$2,066.1	\$1,960.9	\$35.5	\$140.7
Distributed Capital	\$2,110.7	\$2,060.5	\$1,915.2	\$50.2	\$195.5
Market Value	\$1,278.9	\$1,195.0	\$908.9	\$83.9	\$370.0
Total Value	\$3,389.6	\$3,255.5	\$2,824.2	\$134.1	\$565.4
Total Gain/(Loss)	\$1,288.0	\$1,189.4	\$863.3	\$98.6	\$424.7
Unfunded Commitment ²	\$765.6	\$1,593.7	\$673.7	(\$828.0)	\$91.9
Total Exposure ³	\$2,044.6	\$2,788.7	\$1,582.7	(\$744.1)	\$461.9
DPI ⁴	1.00x	1.00x	0.98x	0.01x	0.03x
TVM ⁵	1.61x	1.58x	1.44x	0.04x	0.17x
IRR ⁶	12.3%	12.1%	10.7%	+ 29 bps	+ 163 bps
TVM Net of StepStone Fees ⁷	1.61x	1.57x	1.44x	0.04x	0.17x
IRR Net of StepStone Fees ⁷	12.3%	12.0%	10.7%	+ 29 bps	+ 164 bps

¹ Committed Capital is presented net of any commitment releases or expirations and reflects foreign currency exchange rate fluctuations.

² Unfunded Commitment represents the aggregate remaining commitments to partnership investments.

³ Total Exposure represents the sum of Market Value and Unfunded Commitment.

⁴ DPI, or Distributed to Paid-In Multiple, is a performance metric that measures distributions received relative to capital invested. DPI is calculated as Distributed Capital divided by Contributed Capital.

⁵ TVM, or Total Value Multiple, is a performance metric that measures total value created by the Portfolio relative to capital invested, without consideration for time. TVM is calculated as Total Value, which is comprised of Market Value plus Distributed Capital, divided by Contributed Capital.

⁶ IRR, or Internal Rate of Return, is a performance metric that is calculated based on the Portfolio’s daily cash flows and market value as of quarter-end. IRR is net of fund manager’s fees, expenses and carried interest.

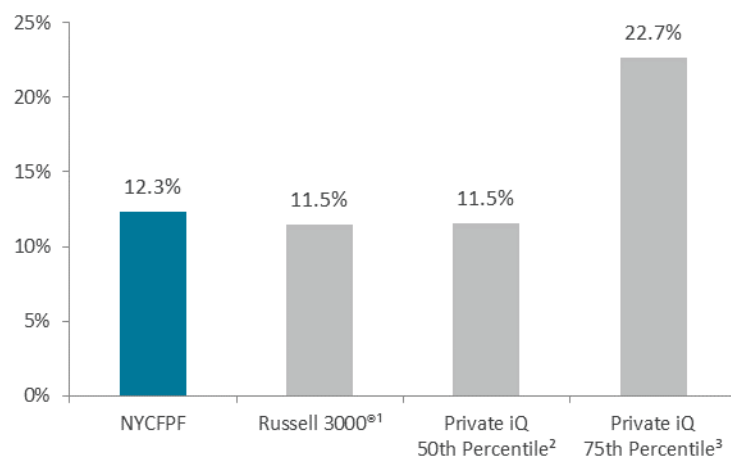
⁷ TVM and IRR Net of StepStone fees represent TVM and IRR net of fees paid by NYCFPF to StepStone. IRR and TVM for certain vehicles may have been impacted by StepStone’s or the underlying GP’s use of subscription-backed credit facilities by such vehicles. Reinvested/recycled amounts increase contributed capital.

Past performance is not necessarily indicative of future results and there can be no assurance that the fund will achieve comparable results or avoid substantial losses.

Portfolio Performance vs. Benchmarks

The Portfolio's performance is measured against a dollar-weighted public benchmark, which produced the return that would have been earned if NYCFFP's private equity cash flows were invested in the Russell 3000® Index¹.

The following graph illustrates Portfolio IRR performance versus benchmarks as of March 31, 2021.



¹Return is a dollar-weighted PME+ calculation of daily changes in the Russell 3000® Index. Russell Investment Group is the source and owner of the trademark, service marks and copyrights related to the Russell Indexes. Russell® is a trademark of Russell Investment Group.

²Private iQ benchmark reflects Equity (all sub-sectors), Mezzanine, Distressed, Oil & Gas Assets asset classes, 50th percentile, or median, IRR at March 31, 2021 for funds with vintage years from 1998 through 2021. Note: Data may be subject to change.

³Private iQ benchmark reflects Equity (all sub-sectors), Mezzanine, Distressed, Oil & Gas Assets asset classes, 50th percentile, or median, IRR at March 31, 2021 for funds with vintage years from 1998 through 2021. Note: Data may be subject to change.

The referenced indices are shown for general market comparisons and are not meant to represent any particular fund. An investor cannot directly invest in an index. Moreover, indices do not reflect commissions or fees that may be charged to an investment product based on the index, which may materially affect the performance data presented.

Portfolio Diversification

By Strategy

As of March 31, 2021 (US\$ in millions)	Market Value		Unfunded Commitment		Total Exposure	
	\$	% of Total	\$	% of Total	\$	% of Total
Buyout	\$818.8	64.0%	\$487.6	63.7%	\$1,306.4	63.9%
Growth Equity	172.7	13.5%	41.2	5.4%	213.9	10.5%
Special Situations	93.6	7.3%	65.7	8.6%	159.3	7.8%
Energy	3.5	0.3%	1.4	0.2%	4.8	0.2%
Secondaries	83.7	6.5%	73.1	9.5%	156.8	7.7%
Co-Investment	66.2	5.2%	70.1	9.2%	136.2	6.7%
Other	40.4	3.2%	1.6	0.2%	42.0	2.1%
Multi-Strategy	0.1	0.0%	25.0	3.3%	25.1	1.2%
Total	\$1,278.9	100.0%	\$765.6	100.0%	\$2,044.6	100.0%

By Fund Geographic Focus

As of March 31, 2021 (US\$ in millions)	Market Value		Unfunded Commitment		Total Exposure	
	\$	% of Total	\$	% of Total	\$	% of Total
North America	\$786.3	61.5%	\$408.0	53.3%	\$1,194.2	58.4%
Global	241.3	18.9%	157.4	20.6%	398.7	19.5%
Western Europe	248.5	19.4%	174.9	22.8%	423.4	20.7%
Rest of World	2.9	0.2%	25.4	3.3%	28.3	1.4%
Total	\$1,278.9	100.0%	\$765.6	100.0%	\$2,044.6	100.0%

Fund Geographic Focus is based on a number of factors, including the GP-stated geographic focus, the number of investments within each region, invested capital by region, the location of the firm's offices and investment professionals, and the underlying fund currency.

II. Market Overview

Executive Summary

At the one year-mark since the start of the pandemic, global equity markets continued to bounce back in Q1 with economists becoming increasingly bullish over near-term growth prospects, as vaccine rollouts and economic reopenings progressed, albeit unevenly, by governments throughout the world. All major global equities experienced strong gains during the quarter, led by the MSCI Asia Index gaining 6.7%, followed by the MSCI Emerging Markets Index and the S&P 500 Total Return Index returning 6.6% and 6.2%, respectively. Meanwhile, the MSCI Europe Index gained 4.2% as rising infection rates and government restrictions in some countries dampened growth in the region. Small cap and value stocks, including the Financials and Energy sectors, which suffered the biggest losses at the start of the Covid-19 pandemic, continued to lead the global equity rally, followed by non-U.S. equities and a number of cyclical sectors, such as Industrials and Materials. The U.S. economy progressed toward the mid-cycle phase of expansion during the quarter supported by favorable fiscal and monetary stimulus programs.

In the private markets, U.S. leveraged buyout (“LBO”) debt volume increased 77.6% quarter-over-quarter and 109.4% year-over-year to US\$46.8 billion, representing the second largest quarterly total since Q2 2017 and significantly higher than the 10-year quarterly average of US\$22.1 billion. According to data from S&P, purchase price multiples for U.S. LBOs were 11.9x EBITDA in the first quarter, down from 12.0x EBITDA in the prior quarter, but above the 10-year average of 9.9x EBITDA. Average debt multiples of large corporate U.S. LBO loans remained flat quarter-over-quarter at 6.2x, still above the 10-year average of 5.6x. Equity contributions for U.S. LBOs decreased 1.1% over the quarter to 43.4%, remaining above the 10-year average of 41.8%.¹

Global private equity fundraising totaled US\$180.0 billion in the first quarter, representing a decline of 7.9% quarter-over-quarter but an increase of 12.91% compared to the first quarter of 2020. U.S.-focused funds represented 76.9% of total dollar amount raised during the quarter, above the 10-year average of 63.3%. Funds raised in Europe, Asia, and the Rest of World made up 12.8%, 7.8% and 2.4% global fundraising for the quarter, respectively. Dollars invested by private equity funds increased 13.7% quarter-over-quarter and 50.6% year-over-year with the average investment per company increasing 13.7% quarter-over-quarter to US\$25.7 million. Companies operating in the Information Technology sector continued to account for a significant portion of the invested capital, with 43.6% of the capital deployed in the first quarter.

Private equity-backed IPO transaction volume increased in the first quarter by 15.9% compared to the prior quarter and by 437.5% compared to the first quarter of 2020, with US\$29.9 billion raised in 54 IPOs. The largest IPOs of the first quarter were completed by Coupang Corp (NYSE:CPNG), which raised US\$4.6 billion, and Bumble Inc (NASDAQ:BMBL), which raised US\$2.5 billion. Together these deals represented 23.2% of the total value for all IPOs during the quarter.

Special purpose acquisition companies (“SPACs”) issuance continued its meteoric rise in Q1 after reaching the largest annual total on record in 2020, although there are signs that momentum is slowing. Specifically, 320 SPACs raised US\$88.5 billion, overtaking the aggregate amount of US\$83.3 raised in 2020 in just one quarter.²

M&A activity decreased 29.2% quarter-over-quarter to US\$150.8 billion but was up 16.5% compared to the first quarter of 2020. The largest M&A deals of the quarter were the US\$18.9 billion purchase of Tiffany & Co. by Louis Vuitton and the US\$8.1 billion purchase of ZeniMax Media Inc. by Microsoft Corporation (NASDAQ:MSFT). Together these deals represented 17.9% of the total value for all deals during the quarter.³

¹ S&P U.S. LBO Review, Q1 2021

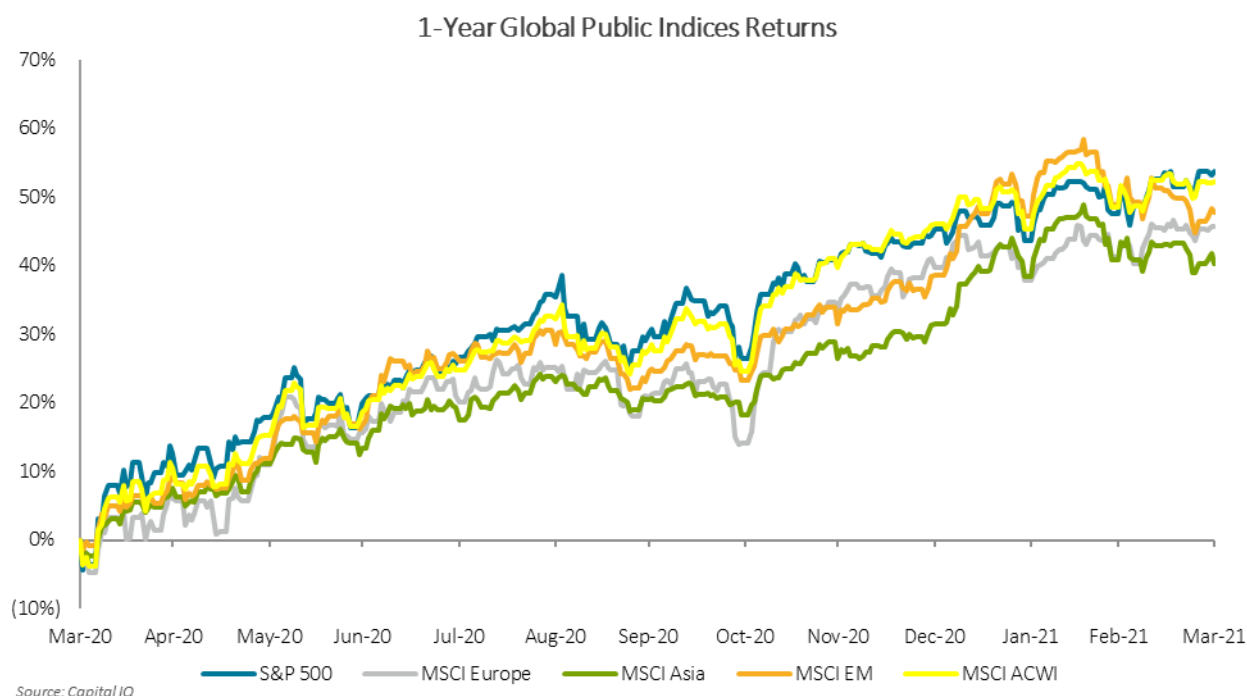
² S&P Global Market Intelligence Q1 2021 Global Capital Markets Activity

³ Capital IQ Transaction Screening Report as of June 9, 2021

Capital Markets Overview

Public Equity Markets

Hopes of global economic recovery, driven by COVID-19 vaccine rollouts and economic reopenings, led all major market indices to post strong gains during the quarter, the four consecutive positive quarter since the start of the pandemic in Q1 2020. Additionally, the Chicago Board Option Exchange's Volatility Index ("VIX") dropped to its lowest point since the beginning of the pandemic.



The following table shows the returns of four major MSCI indices, as well as the S&P 500 and the S&P 500 Total Return Index, over various time horizons through March 31, 2021. Returns for time periods greater than one year are annualized. All indices built on their sharp gains from previous quarter, led by the MSCI Asia with 6.7%.

Regional Indices

	3 Mo	1 Yr	3 Yr	5 Yr	10 Yr
MSCI Asia	6.7%	40.2%	10.5%	12.6%	7.7%
MSCI Europe	4.2%	45.7%	6.3%	8.8%	5.7%
MSCI EM	6.6%	47.7%	9.0%	12.2%	4.3%
MSCI ACWI	4.2%	52.2%	10.0%	11.1%	7.0%
S&P 500	5.8%	53.7%	14.6%	14.0%	11.6%
S&P 500 Total Return*	6.2%	56.4%	16.8%	16.3%	13.9%

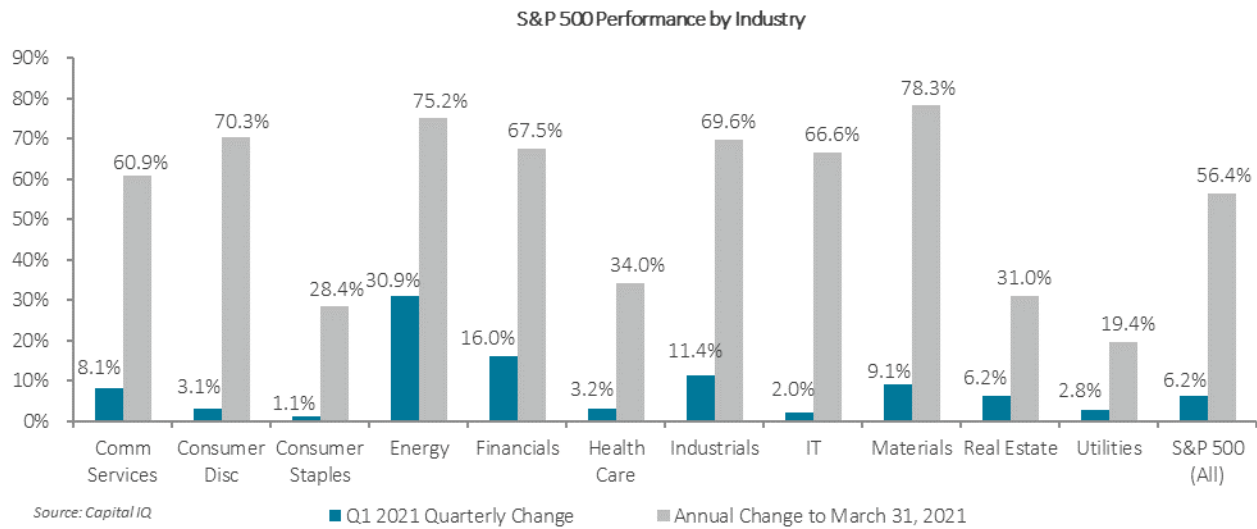
For the period ended March 31, 2021

*Includes reinvestment of dividends.

Source: Capital IQ

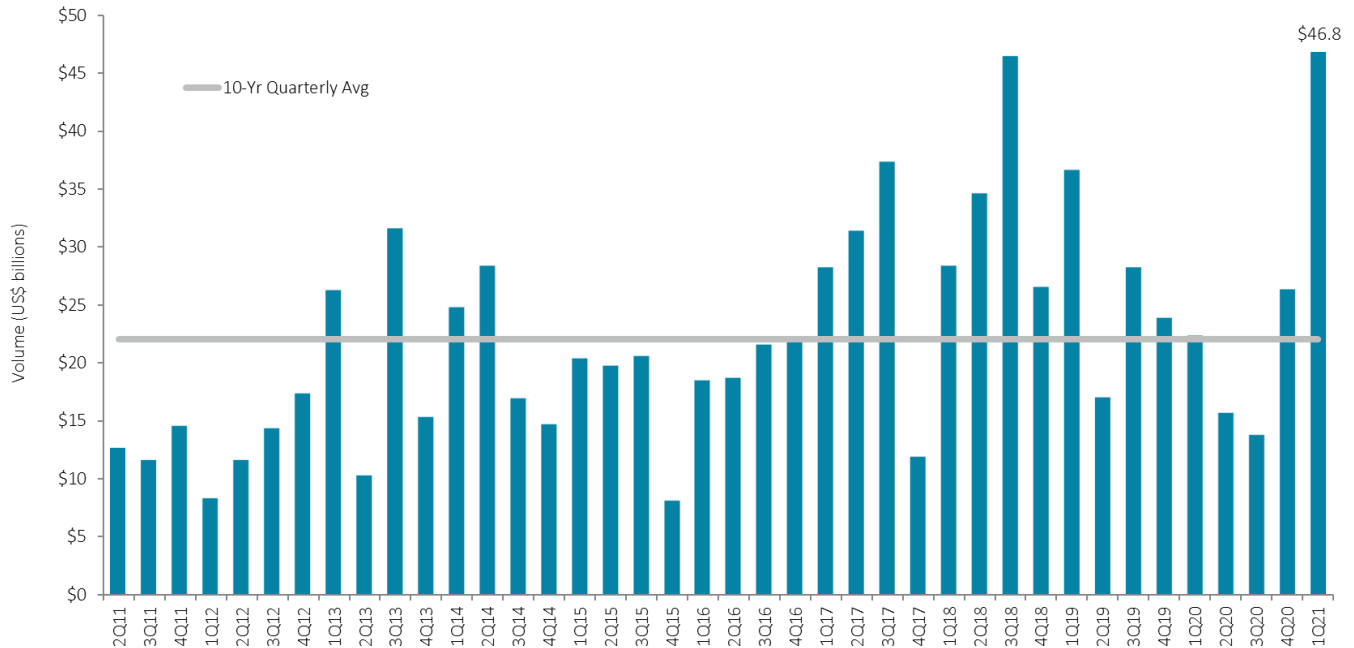
The referenced indices are shown for general market comparisons and are not meant to represent any particular fund. An investor cannot directly invest in an index. Moreover, indices do not reflect commissions or fees that may be charged to an investment product based on the index, which may materially affect the performance data presented.

The following table shows the quarterly and annual returns of the S&P 500 Total Return and each GIC sector for the period ending March 31, 2021. All 11 GIC sectors were up during the first quarter, led by Energy, Financials and Industrials, rising 30.9%, 16.0% and 11.4%, respectively.

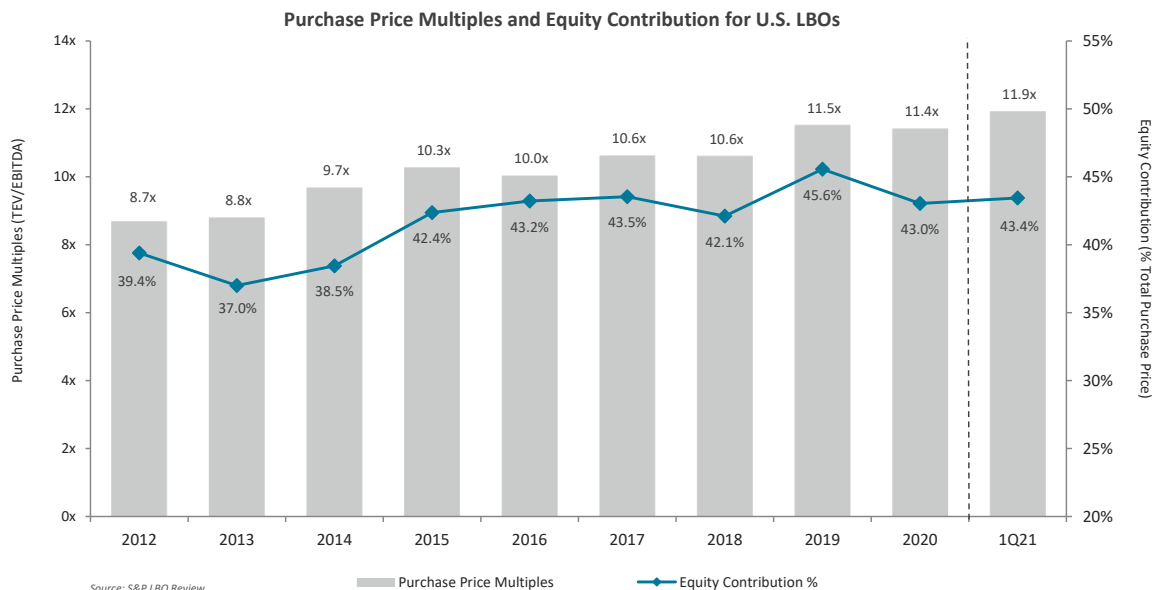


Debt Markets

During the first quarter of 2021, US LBO debt volume increased 77.6% quarter-over-quarter and 109.4% year-over-year to US\$46.8 billion, representing the second largest quarterly total since Q2 2017 and significantly higher than the 10-year quarterly average of US\$22.1 billion. The following chart shows the quarterly volume of US LBO new loan issuance for the past ten years.



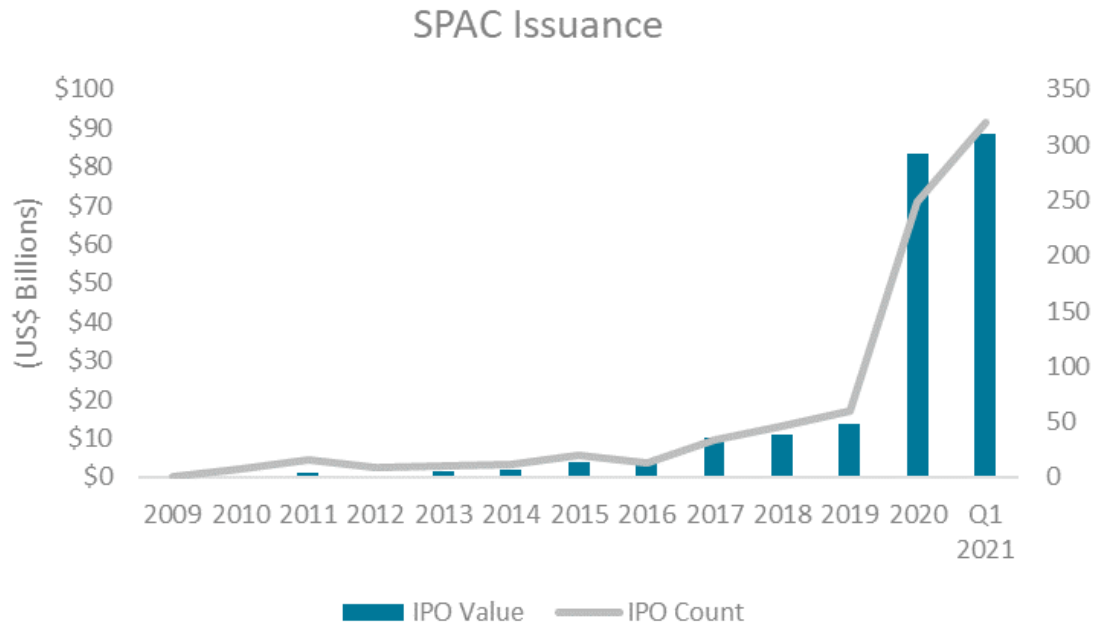
The weighted average purchase price multiple for U.S. LBO deals remained elevated at 11.9x total enterprise value (“TEV”) to EBITDA but down slightly from 12.0x EBITDA in the prior quarter while still above the average of 11.4x during 2020 and the 10-year average of 9.9x. The average debt multiple of large corporate U.S. LBO loans remained flat at 6.2x during the quarter, while equity contributions for U.S. LBOs also increased from 42.3% to 43.4%. The following chart compares purchase price multiples and equity contribution percentages for U.S. LBO deals.



Private Equity Market Overview

SPAC Review

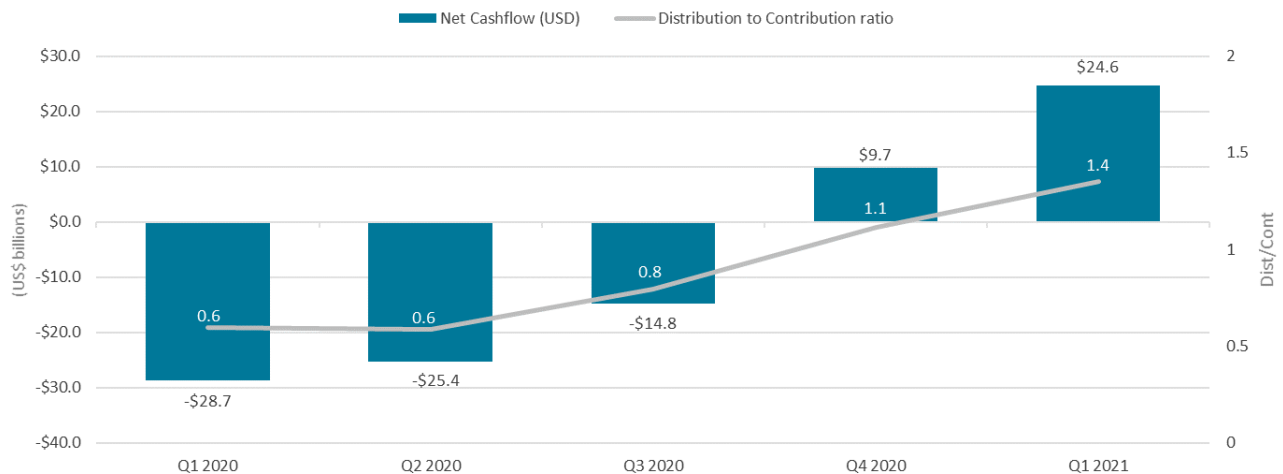
During the first quarter of 2021, 320 SPACs raised US\$88.5 billion, outpacing the aggregate amount raised throughout all of 2020, continuing the popular trend to go public.



Source: S&P Global Market Intelligence Q1 2021 Global Capital Markets Activity

Cash Flow Activity

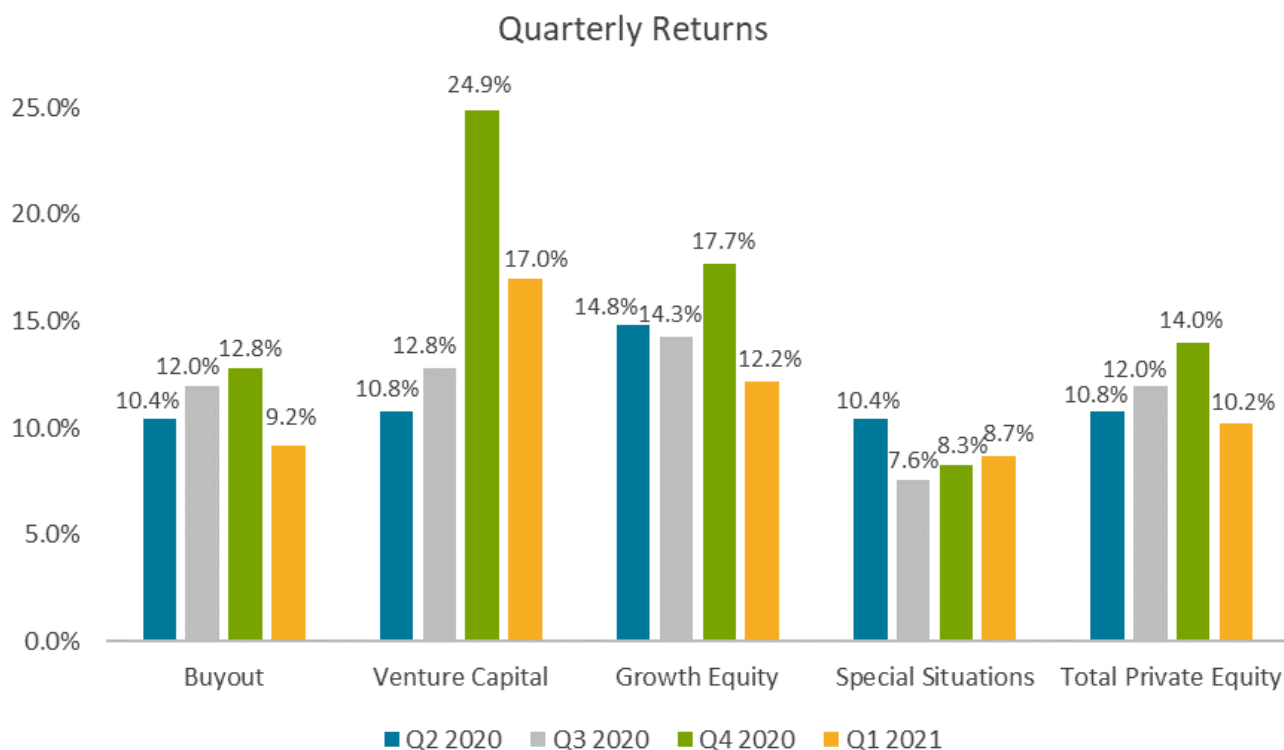
Net cash flows of private equity investors continued to trend upwards in Q1 as distributions picked up relative to contributions, generating a distribution-to-contribution ratio of 1.4x during the quarter.



Source: StepStone Portfolio Analytics & Reporting ("SPAR"). SPAR data are updated continuously; values are subject to change.

Private Equity Performance

Private equity returns for Q1 2021 remained strong at 10.2%, led by Venture Capital and Growth Equity funds generating quarterly returns of 17.0% and 12.2%, respectively.

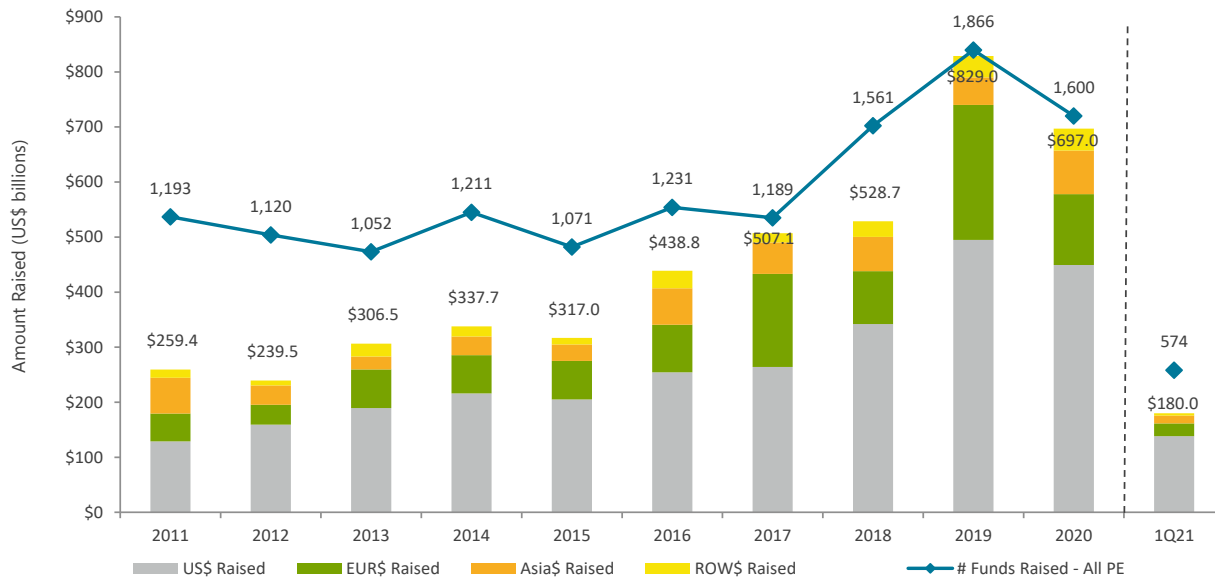


Source: StepStone Portfolio Analytics & Reporting ("SPAR"). SPAR data are updated continuously; values are subject to change.
 Based on Q1 NAVs reported as of June 21, 2021.

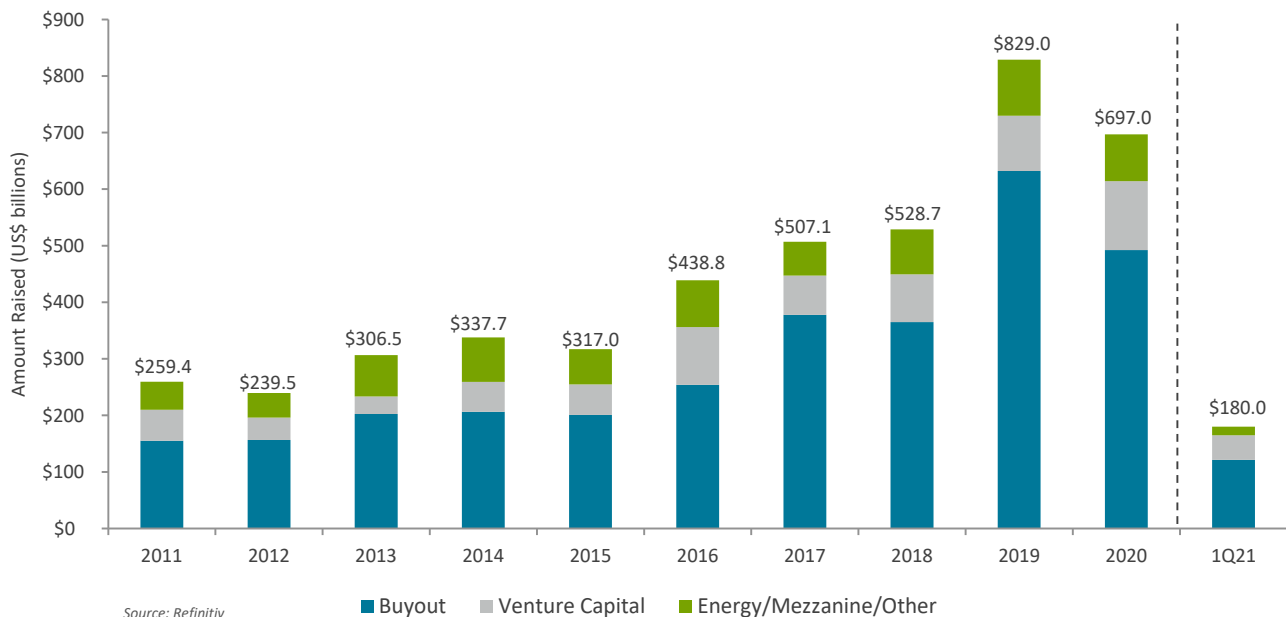
Fundraising

Global private equity fundraising totaled US\$180.0 billion in the first quarter, representing a decline of 7.9% quarter-over-quarter but an increase of 12.9% compared to the first quarter of 2020. Buyout fundraising, which represented 67.6% of the total amount raised for the quarter, totaled US\$121.4 billion, a decrease of 6.3% from the prior quarter and an increase of 22.1% compared to the prior year period. Venture Capital raised US\$43.4 billion in the first quarter, an increase of 7.1% quarter-over-quarter and an increase of 61.9% compared to the first quarter of 2020. The charts below depict annual private equity fundraising activity by geography and strategy.

Fundraising by Year – Geography



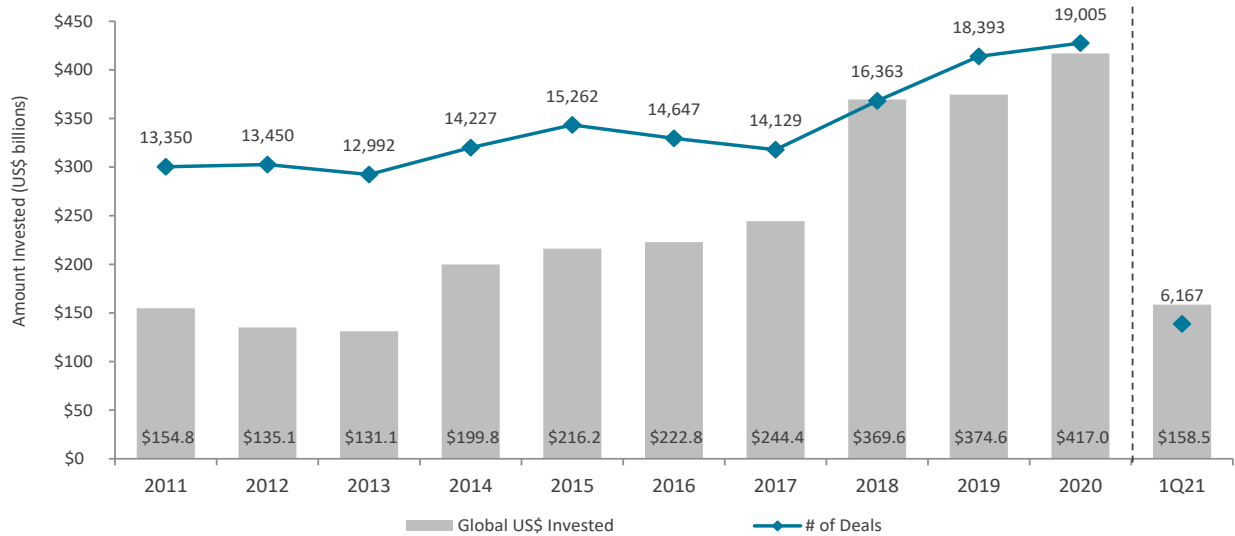
Fundraising by Year – Strategy



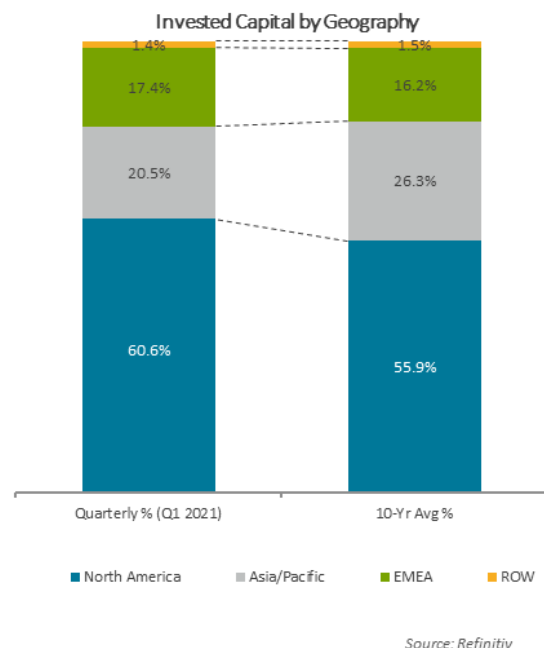
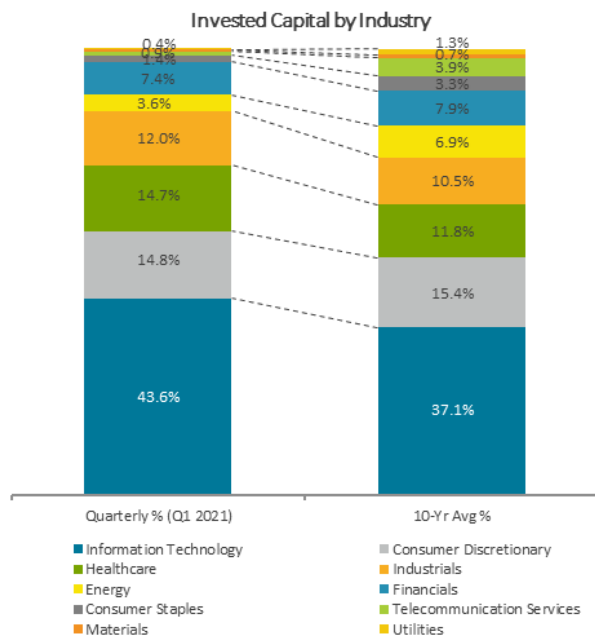
Investment Activity

Private equity funds invested US\$158.5 billion globally during the first quarter, representing a quarter-over-quarter increase of 31.9% and an increase of 105.8% from the first quarter of 2020. The average investment size during the quarter was US\$25.7 million, an increase of 13.7% compared to the average investment size of US\$22.6 million in the fourth quarter of 2020.

Investment Activity - All Private Equity

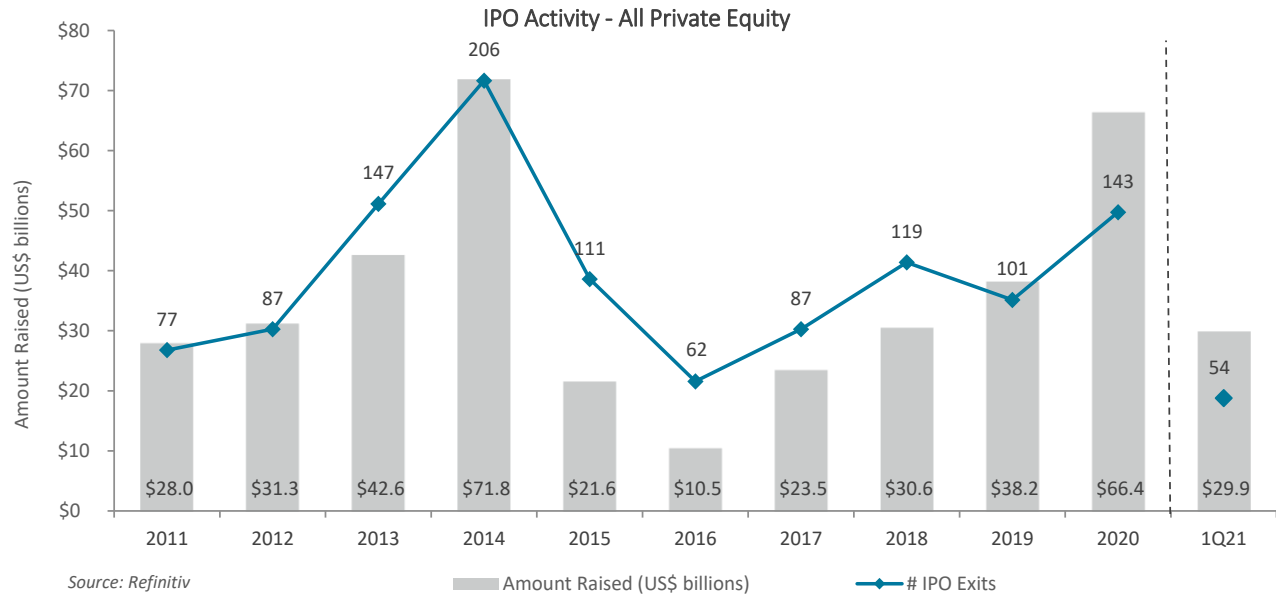


The graphs below depict the percentage of invested capital by industry and geography for the first quarter of 2021 and over the last ten years. Companies operating in the Information Technology sector continue to account for a significant portion of the invested capital, with 43.6% of the capital deployed in the first quarter. Geographically, investment activity in North America was above its 10-year average, comprising 60.6% of total capital invested in the first quarter while investments in the Asia/Pacific region represented 20.5% of total capital invested during the quarter, significantly less than its 10-year average of 26.3%.

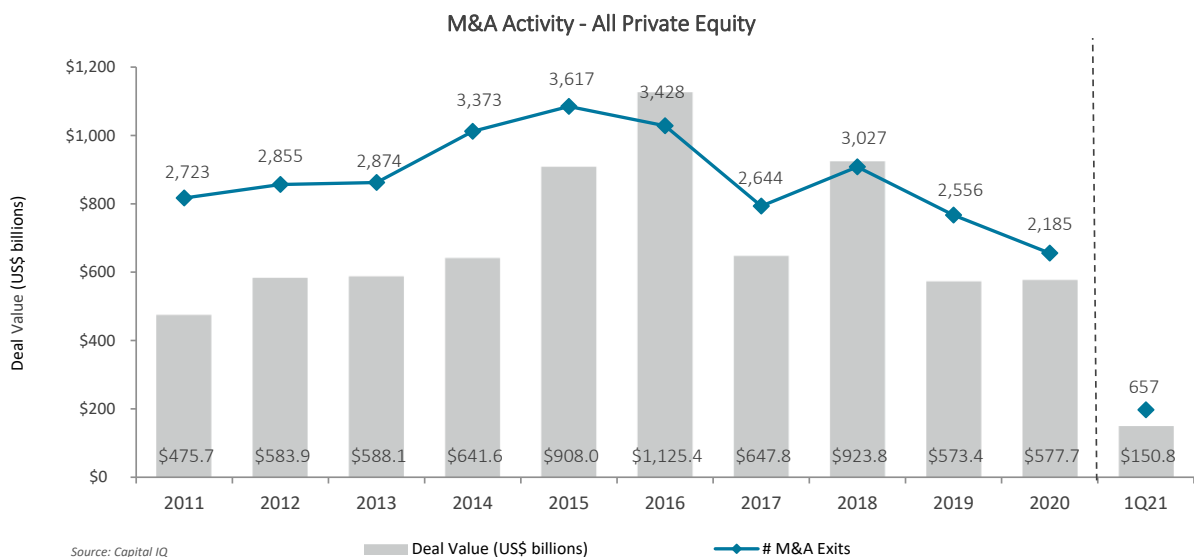


Exit Environment

In the first quarter, the number of private equity-backed IPOs increased by 15.9% compared to the prior quarter and by 437.5% compared to the first quarter of 2020, with US\$29.9 billion raised in 54 IPOs. The largest IPOs of the first quarter were completed by Coupang Corp (NYSE:CPNG), which raised US\$4.6 billion, and Bumble Inc (NASDAQ:BMBL), which raised US\$2.5 billion. Together these deals represented 23.2% of the total value for all IPOs during the quarter.



The number of private equity-backed Mergers and Acquisitions (“M&A”) decreased 29.2% during the quarter but was up 16.5% compared to the first quarter of 2020. In the first quarter, there were 657 private equity backed M&A deals totaling US\$150.8 billion. The largest M&A deals of the quarter were the US\$18.9 billion purchase of Tiffany & Co. by Louis Vuitton and the US\$8.1 billion purchase of ZeniMax Media Inc. by Microsoft Corporation (NASDAQ:MSFT). Together these deals represented 17.9% of the total value for all deals during the quarter. The graph below shows the deal value and the number of M&A deals.



III. Portfolio Review

Quarterly Highlights

- Cash Flow Activity** – During the first quarter of 2021, the Portfolio made US\$35.5 million of contributions and received US\$50.2 million of distributions, for a net cash inflow of US\$14.7 million, compared to a net cash inflow of US\$26.9 million during the prior quarter and a net cash inflow of US\$0.9 million during the first quarter of 2020. Contributions decreased 23.4% from the prior quarter and decreased 3.1% from the first quarter of 2020. The most recent four quarter average of the Program's contributions is US\$35.2 million. Distributions decreased 31.5% from the prior quarter and increased 33.7% from the first quarter of 2020. The most recent four quarter average of the Program's distributions is US\$48.9 million.
- Recent Portfolio Activity** – During the first quarter of 2021, net of cash flow activity, the valuation of the Portfolio increased by US\$98.6 million, or 8.4%, from the prior quarter. The increase in Portfolio value is primarily attributable to strong performance of Mega Buyout funds during the quarter, which generated a US\$36.0 million increase in valuation from the prior quarter-end. During the last twelve months, net of cash flow activity, the valuation of the Portfolio increased by US\$424.7 million, or 49.7%, from the quarter ended March 31, 2020.
- New Investment Commitments** – The Program closed on one new investment commitments during the first quarter of 2021, totaling US\$5.0 million.

As of March 31, 2021 (US\$ in millions)

	Month Closed	Strategy	Geographic Focus	Committed Capital	
Grain Communications Opportunity Fund III, L.P.	March 2021	Buyout	North America	\$	5.0
Total				\$	5.0

- Subsequent Investment Commitments** – Subsequent to quarter-end through August 6, 2021, the Program has closed on six new investment commitments, totaling US\$165.5 million.

As of August 6, 2021 (US\$ in millions)

	Month Closed	Strategy	Geographic Focus	Committed Capital	
Providence Strategic Growth V L.P.	May 2021	Growth Equity	North America	\$	44.0
Vistria Fund IV, L.P.	May 2021	Buyout	North America		11.0
Harbourvest Centre Street Co-Investment Fund L.P.	June 2021	Co-Investment	North America		39.0
KKR Americas Fund XIII, L.P.	July 2021	Buyout	North America		40.0
Warburg Pincus Financial Sector II, L.P.	July 2021	Growth Equity	Global		19.5
Apax Digital Fund II	July 2021	Growth Equity	North America		12.0
Total				\$	165.5

Investment Performance

Since Inception Performance

US\$ in millions	March 31, 2021	December 31, 2020	March 31, 2020	Quarterly Change	Yearly Change
Active Investments					
Number of Managers	102	102	100	-	2
Number of Investments	205	204	196	1	9
Committed Capital ¹	\$2,380.2	\$2,378.7	\$2,175.5	\$1.5	\$204.7
Contributed Capital	\$1,859.2	\$1,823.7	\$1,732.5	\$35.5	\$126.7
Distributed Capital	\$1,798.1	\$1,747.9	\$1,622.7	\$50.2	\$175.4
Market Value	\$1,278.9	\$1,195.0	\$908.9	\$83.9	\$370.0
Total Value	\$3,077.0	\$2,942.9	\$2,531.6	\$134.1	\$545.4
Total Gain/(Loss)	\$1,217.8	\$1,119.2	\$799.1	\$98.6	\$418.7
Unfunded Commitment ²	\$765.6	\$796.8	\$673.7	(\$31.2)	\$91.9
Total Exposure ³	\$2,044.6	\$1,991.8	\$1,582.7	\$52.7	\$461.9
DPI ⁴	0.97x	0.96x	0.94x	0.01x	0.03x
TVM ⁵	1.66x	1.61x	1.46x	0.04x	0.19x
IRR ⁶	13.5%	13.2%	11.6%	+ 33 bps	+ 196 bps
Exited Investments					
Number of Managers	38	38	34	-	4
Number of Investments	44	44	40	-	4
Committed Capital ¹	\$219.0	\$219.0	\$207.0	(\$0.0)	\$12.1
Contributed Capital	\$242.4	\$242.4	\$228.4	\$0.0	\$14.0
Distributed Capital	\$312.6	\$312.6	\$292.5	\$0.0	\$20.0
Total Value	\$312.6	\$312.6	\$292.5	\$0.0	\$20.0
Total Gain/(Loss)	\$70.2	\$70.2	\$64.2	\$0.0	\$6.0
Unfunded Commitment ²	\$0.0	\$796.8	\$0.0	(\$796.8)	\$0.0
DPI ⁴	1.29x	1.29x	1.28x	0.00x	0.01x
TVM ⁵	1.29x	1.29x	1.28x	0.00x	0.01x
IRR ⁶	7.0%	7.0%	6.9%	- 0 bps	+ 2 bps
Total Portfolio					
Number of Managers	125	125	122	-	3
Number of Investments	249	248	236	1	13
Committed Capital ¹	\$2,599.2	\$2,597.7	\$2,382.5	\$1.5	\$216.7
Contributed Capital	\$2,101.6	\$2,066.1	\$1,960.9	\$35.5	\$140.7
Distributed Capital	\$2,110.7	\$2,060.5	\$1,915.2	\$50.2	\$195.5
Market Value	\$1,278.9	\$1,195.0	\$908.9	\$83.9	\$370.0
Total Value	\$3,389.6	\$3,255.5	\$2,824.2	\$134.1	\$565.4
Total Gain/(Loss)	\$1,288.0	\$1,189.4	\$863.3	\$98.6	\$424.7
Unfunded Commitment ²	\$765.6	\$1,593.7	\$673.7	(\$828.0)	\$91.9
Total Exposure ³	\$2,044.6	\$2,788.7	\$1,582.7	(\$744.1)	\$461.9
DPI ⁴	1.00x	1.00x	0.98x	0.01x	0.03x
TVM ⁵	1.61x	1.58x	1.44x	0.04x	0.17x
IRR ⁶	12.3%	12.1%	10.7%	+ 29 bps	+ 163 bps
TVM Net of StepStone Fees ⁷	1.61x	1.57x	1.44x	0.04x	0.17x
IRR Net of StepStone Fees ⁷	12.3%	12.0%	10.7%	+ 29 bps	+ 164 bps

¹ Committed Capital is presented net of any commitment releases or expirations and reflects foreign currency exchange rate fluctuations. Total committed includes underlying fund commitments to the EM 2012, 2015, and 2019 Programs.

² Unfunded Commitment represents the aggregate remaining commitments to partnership investments.

³ Total Exposure represents the sum of Market Value and Unfunded Commitment.

⁴ DPI, or Distributed to Paid-In Multiple, is a performance metric that measures distributions received relative to capital invested. DPI is calculated as Distributed Capital divided by Contributed Capital.

⁵ TVM, or Total Value Multiple, is a performance metric that measures total value created by the Portfolio relative to capital invested, without consideration for time. TVM is calculated as Total Value, which is comprised of Market Value plus Distributed Capital, divided by Contributed Capital.

⁶ IRR, or Internal Rate of Return, is a performance metric that is calculated based on the Portfolio's daily cash flows and market value as of quarter-end. IRR is net of fund manager's fees, expenses and carried interest.

⁷ TVM and IRR Net of StepStone fees represent TVM and IRR net of fees paid by NYCPFF to StepStone. IRR and TVM for certain vehicles may have been impacted by StepStone's or the underlying GPs' use of subscription-backed credit facilities by such vehicles. Reinvested/recycled amounts increase contributed capital.

Past performance is not necessarily indicative of future results and there can be no assurance that the fund will achieve comparable results or avoid substantial losses.

Performance by Vintage Year

The following table and chart illustrate the Portfolio's since inception investment performance by vintage year as of March 31, 2021 relative to the median quartile U.S. All Private Equity TVM and IRR benchmarks as provided by Burgiss Private iQ. Performance of funds that are less than two years old are not meaningful. Note that Burgiss Private iQ data is continuously updated and is therefore subject to change.

As of March 31, 2021 (US\$ in millions)

Vintage Year	Committed Capital	Contributed Capital	Distributed Capital	Market Value	Unfunded Commitment	Total Exposure	TVM	IRR	PME Return ¹	PME Spread ²	Private iQ U.S. All PE 50th Percentile TVM	Private iQ U.S. All PE 50th Percentile IRR
1998	\$10.0	\$10.0	\$13.8	\$0.0	\$0.0	\$0.0	1.37x	6.3%	3.4%	2.9%	1.37x	6.0%
1999	54.5	63.0	91.4	0.1	-	0.1	1.45x	8.8%	6.4%	2.4%	0.89x	(1.4%)
2000	28.8	33.8	42.5	1.0	-	1.0	1.29x	6.4%	6.2%	0.2%	1.19x	3.1%
2001	49.1	58.8	99.4	0.8	1.2	2.0	1.70x	21.2%	8.3%	12.9%	1.44x	7.2%
2002	5.0	4.8	7.3	-	-	-	1.54x	23.3%	7.5%	15.8%	1.50x	10.5%
2003	28.9	31.7	67.5	1.3	2.5	3.8	2.17x	25.0%	7.2%	17.8%	1.55x	9.8%
2004	54.3	59.1	61.5	2.6	0.9	3.5	1.08x	1.8%	6.9%	-5.0%	1.49x	8.3%
2005	68.2	76.7	104.1	10.0	1.6	11.6	1.49x	7.1%	7.9%	-0.8%	1.36x	6.1%
2006	134.9	152.2	208.1	16.2	3.4	19.6	1.47x	7.4%	9.0%	-1.6%	1.43x	6.5%
2007	123.4	134.4	151.3	24.5	8.4	32.9	1.31x	6.1%	11.5%	-5.4%	1.61x	10.4%
2008	194.7	225.7	317.1	53.1	11.3	64.4	1.64x	11.9%	13.9%	-2.0%	1.54x	10.5%
2009	46.9	46.3	85.3	12.1	2.4	14.4	2.10x	17.5%	14.7%	2.8%	1.99x	16.3%
2010	42.5	47.5	62.3	18.5	6.6	25.2	1.70x	16.0%	13.9%	2.2%	1.70x	13.2%
2011	193.2	197.4	271.7	100.3	18.8	119.0	1.88x	16.9%	14.0%	2.9%	1.94x	16.0%
2012	133.6	144.9	174.0	101.4	13.7	115.2	1.90x	17.5%	13.6%	4.0%	1.82x	15.7%
2013	161.0	144.8	112.4	115.4	29.7	145.0	1.57x	14.1%	14.0%	0.1%	1.79x	15.9%
2014	169.8	173.2	122.0	181.7	28.6	210.4	1.75x	18.4%	14.6%	3.8%	1.72x	16.3%
2015	121.6	111.1	65.1	133.8	18.7	152.5	1.79x	23.0%	16.6%	6.4%	1.55x	15.7%
2016	92.9	93.4	33.8	133.8	12.0	145.8	1.79x	24.0%	17.6%	6.4%	1.58x	18.4%
2017	145.7	111.9	9.7	157.8	42.2	200.0	1.50x	23.0%	20.0%	3.0%	1.46x	22.4%
2018	223.3	98.7	7.9	117.7	127.4	245.1	1.27x	20.9%	26.6%	-5.7%	1.32x	20.0%
2019	247.9	60.7	2.1	72.6	188.7	261.2	NM	NM	NM	NM	NM	NM
2020	165.9	21.4	0.1	24.7	144.6	169.3	NM	NM	NM	NM	NM	NM
2021	103.0	-	-	(0.2)	103.0	102.8	NM	NM	NM	NM	NM	NM
Total	\$2,599.2	\$2,101.6	\$2,110.7	\$1,278.9	\$765.6	\$2,044.6	1.61x	12.3%	11.5%	0.9%	1.45x	11.5%

As of March 31, 2021



Portfolio Periodic Returns vs. Russell 3000® Index

<i>As of March 31, 2021</i>	3 Month	1 Year	3 Year	5 Year	10 Year	Since Inception
NYCFFP IRR	8.3%	47.3%	17.2%	17.2%	13.2%	12.3%
Russell 3000® ¹	6.3%	63.9%	17.0%	16.6%	13.6%	11.5%
Russell 3000® + 300 bps ²	9.3%	66.9%	20.0%	19.6%	16.6%	14.5%
NYCERS Outperformance/(Underperformance)						
vs. Russell 3000® + 300 bps ²	(1.1%)	(19.6%)	(2.7%)	(2.4%)	(3.4%)	(2.1%)

¹Return is a dollar-weighted PME+ calculation of daily changes in the Russell 3000® Index. Russell Investment Group is the source and owner of the trademark, service marks and copyrights related to the Russell Indexes. Russell® is a trademark of Russell Investment Group.

²Benchmark is a dollar-weighted PME+ calculation of daily changes in the Russell 3000® Index plus a 300 basis point illiquidity premium (the Opportunity Cost Benchmark).

Note: The referenced indices are shown for general market comparisons and are not meant to represent any particular fund. An investor cannot directly invest in an index. Moreover, indices do not reflect commissions or fees that may be charged to an investment product based on the index, which may materially affect the performance data presented.

Performance by Strategy / Sub-Strategy

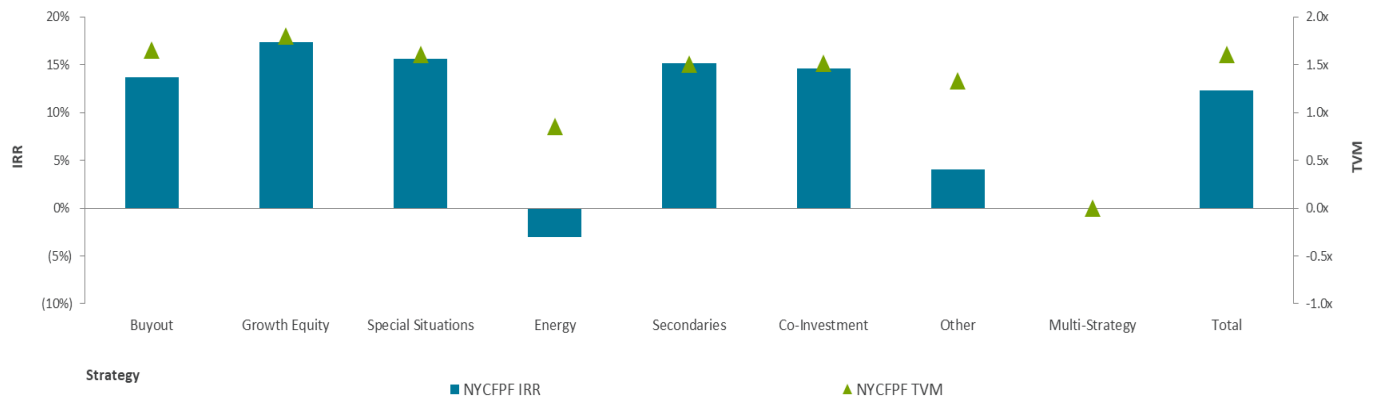
The following table and charts illustrate the Portfolio's since inception investment performance by strategy and sub-strategy as of March 31, 2021.

As of March 31, 2021 (US\$ in millions)

Strategy / Sub-Strategy	Committed Capital	Contributed Capital	Distributed Capital	Market Value	Unfunded Commitment	Total Exposure	TVM	IRR
Buyout	\$1,618.8	\$1,328.9	\$1,382.0	\$818.8	\$487.6	\$1,306.4	1.66x	13.7%
Mega Buyout	601.5	398.8	275.1	379.3	255.6	635.0	1.64x	15.3%
Large Buyout	428.5	404.7	488.7	274.1	94.3	368.4	1.88x	24.0%
Middle-Market Buyout	350.8	273.7	303.6	102.4	120.6	223.0	1.48x	8.9%
Small Buyout	237.9	251.8	314.7	62.9	17.0	79.9	1.50x	9.9%
Growth Equity	224.2	210.3	205.7	172.7	41.2	213.9	1.80x	17.4%
Special Situations	190.0	148.4	144.8	93.6	65.7	159.3	1.61x	15.7%
Energy	37.5	41.1	31.6	3.5	1.4	4.8	0.85x	-3.0%
Secondaries	244.0	170.1	172.1	83.7	73.1	156.8	1.50x	15.2%
Co-Investment	131.1	61.7	27.3	66.2	70.1	136.2	1.52x	14.6%
Other	128.7	141.1	147.2	40.4	1.6	42.0	1.33x	4.0%
Venture Capital	112.6	120.8	121.5	39.5	0.9	40.4	1.33x	3.7%
Mezzanine	16.1	20.3	25.7	0.9	0.7	1.6	1.31x	10.0%
Multi-Strategy	25.0	-	-	0.1	25.0	25.1	0.00x	0.0%
FoF	25.0	-	-	0.1	25.0	25.1	0.00x	0.0%
Total	\$2,599.2	\$2,101.6	\$2,110.7	\$1,278.9	\$765.6	\$2,044.6	1.61x	12.3%

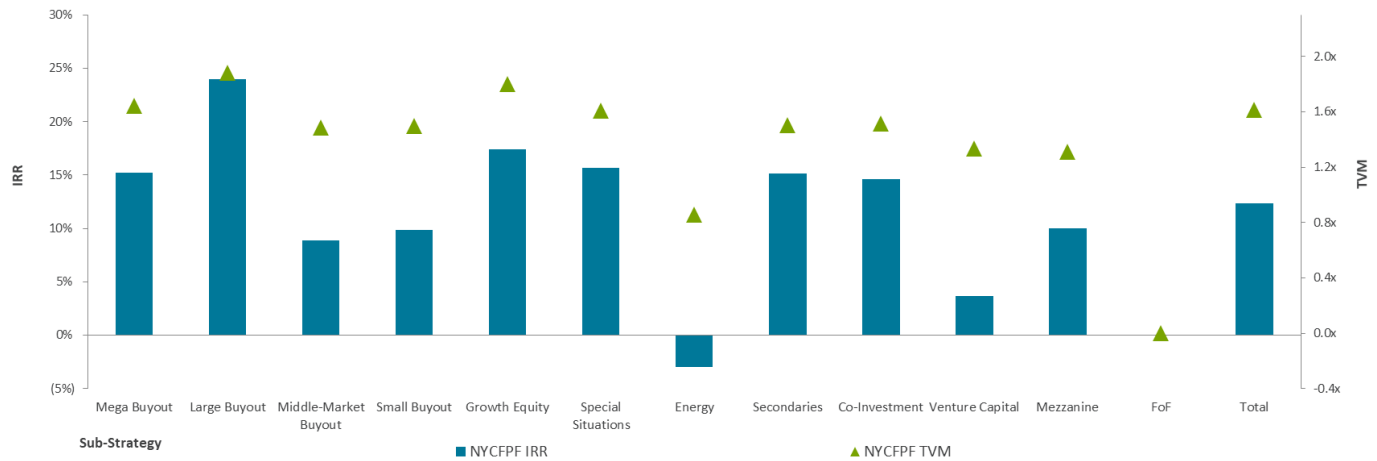
Performance by Strategy

As of March 31, 2021



Performance by Sub-Strategy

As of March 31, 2021



Portfolio Diversification

The following tables illustrate the Portfolio's diversification by strategy and fund geographic focus as of March 31, 2021.

By Strategy/Sub-Strategy

As of March 31, 2021 (US\$ in millions)	Market Value		Unfunded Commitment		Total Exposure	
	\$	% of Total	\$	% of Total	\$	% of Total
Buyout	\$818.8	64.0%	\$487.6	63.7%	\$1,306.4	63.9%
Mega Buyout	379.3	29.7%	255.6	33.4%	635.0	31.1%
Large Buyout	274.1	21.4%	94.3	12.3%	368.4	18.0%
Middle-Market Buyout	102.4	8.0%	120.6	15.8%	223.0	10.9%
Small Buyout	62.9	4.9%	17.0	2.2%	79.9	3.9%
Growth Equity	172.7	13.5%	41.2	5.4%	213.9	10.5%
Special Situations	93.6	7.3%	65.7	8.6%	159.3	7.8%
Energy	3.5	0.3%	1.4	0.2%	4.8	0.2%
Secondaries	83.7	6.5%	73.1	9.5%	156.8	7.7%
Co-Investment	66.2	5.2%	70.1	9.2%	136.2	6.7%
Other	40.4	3.2%	1.6	0.2%	42.0	2.1%
Venture Capital	39.5	3.1%	0.9	0.1%	40.4	2.0%
Mezzanine	0.9	0.1%	0.7	0.1%	1.6	0.1%
Multi-Strategy	0.1	0.0%	25.0	3.3%	25.1	1.2%
FoF	0.1	0.0%	25.0	3.3%	25.1	1.2%
Total	\$1,278.9	100.0%	\$765.6	100.0%	\$2,044.6	100.0%

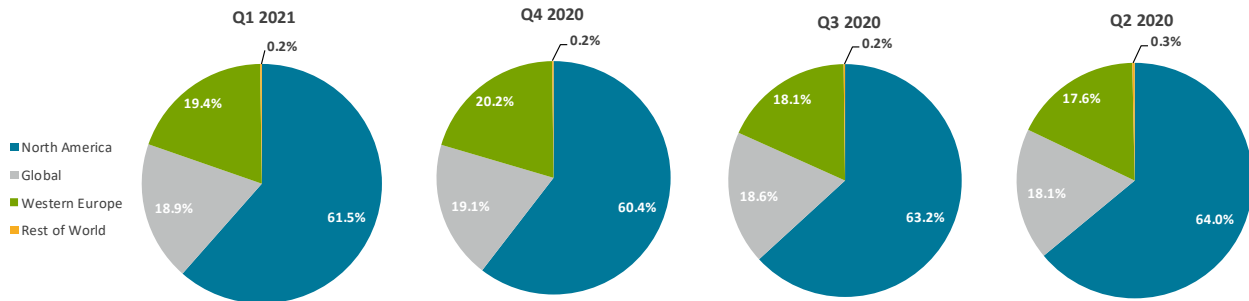
By Fund Geographic Focus

As of March 31, 2021 (US\$ in millions)	Market Value		Unfunded Commitment		Total Exposure	
	\$	% of Total	\$	% of Total	\$	% of Total
North America	\$786.3	61.5%	\$408.0	53.3%	\$1,194.2	58.4%
Global	241.3	18.9%	157.4	20.6%	398.7	19.5%
Western Europe	248.5	19.4%	174.9	22.8%	423.4	20.7%
Rest of World	2.9	0.2%	25.4	3.3%	28.3	1.4%
Total	\$1,278.9	100.0%	\$765.6	100.0%	\$2,044.6	100.0%

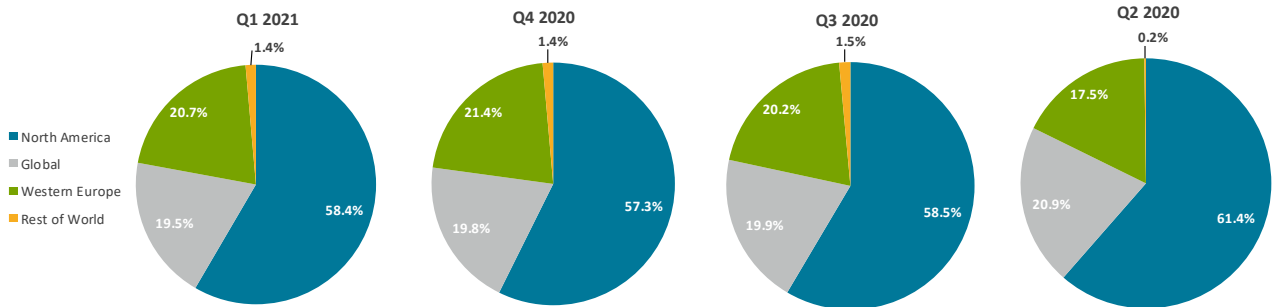
By Fund Geographic Focus

The following charts illustrate the Portfolio's diversification by fund geographic focus for the most recent four quarters as of March 31, 2021.

Geographic Exposure by Market Value



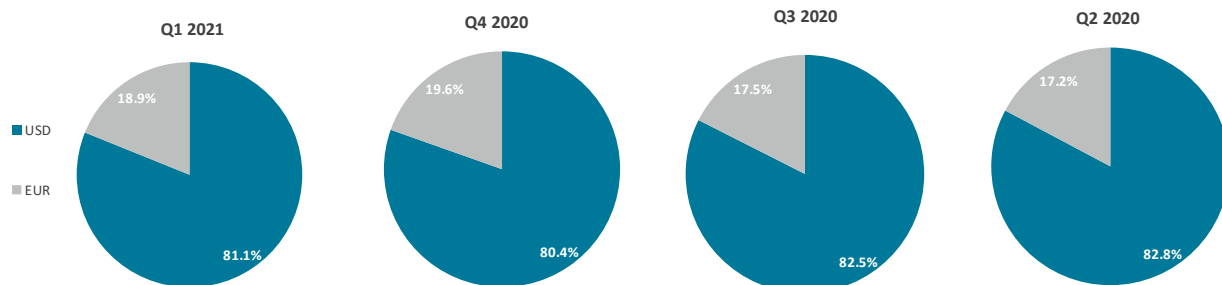
Geographic Exposure by Market Value + Unfunded



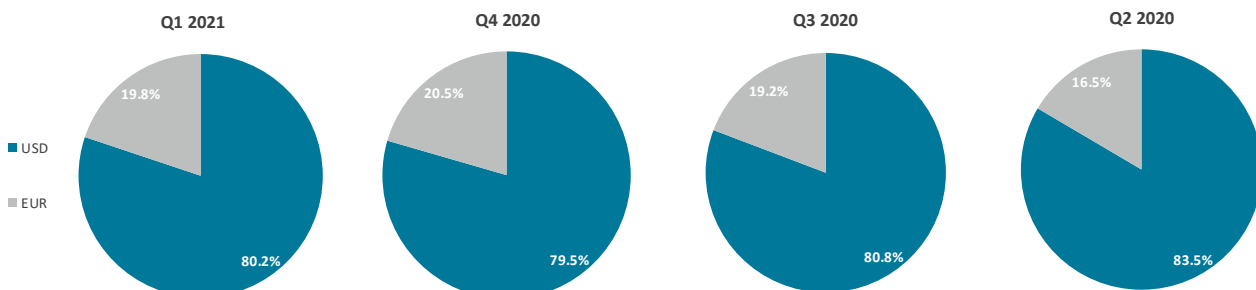
By Fund Currency

The following charts illustrate the Portfolio's diversification by fund currency for the most recent four quarters as of March 31, 2021.

Fund Currency Exposure by Market Value



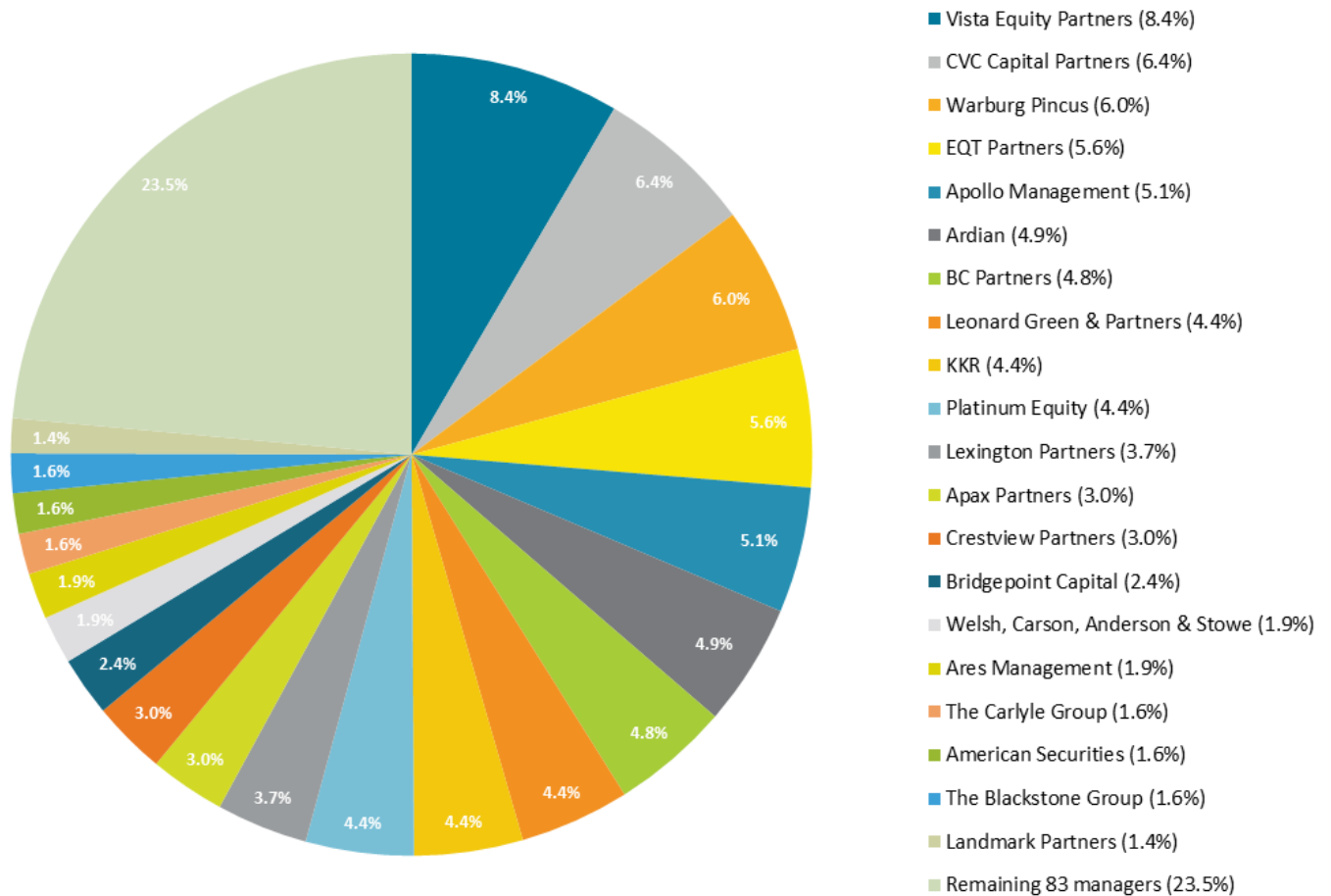
Fund Currency Exposure by Market Value + Unfunded



By Investment Manager

As of March 31, 2021, the Portfolio was highly diversified by investment manager, with 20 managers comprising US\$1.6 billion, or 76.5% of total exposure. The remaining 83 managers comprised 23.5% of total exposure as of quarter-end.

Portfolio Total Exposure by Investment Manager
As of March 31, 2021

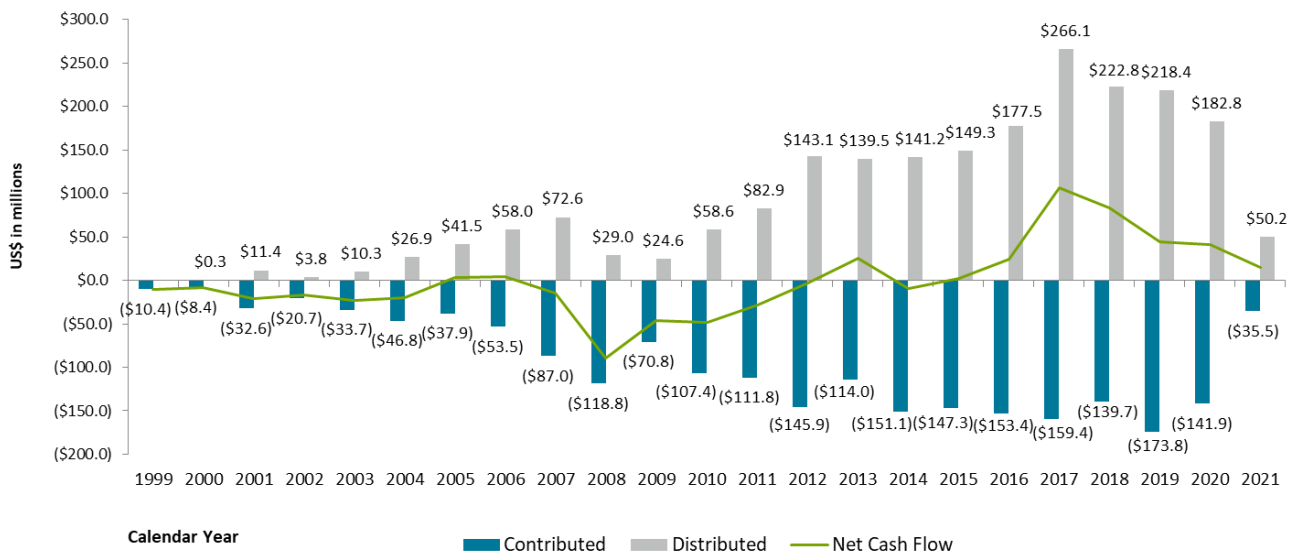


Portfolio Cash Flow Analysis

The following yearly and quarterly cash flow analysis is based on actual Portfolio cash flows during those time periods.

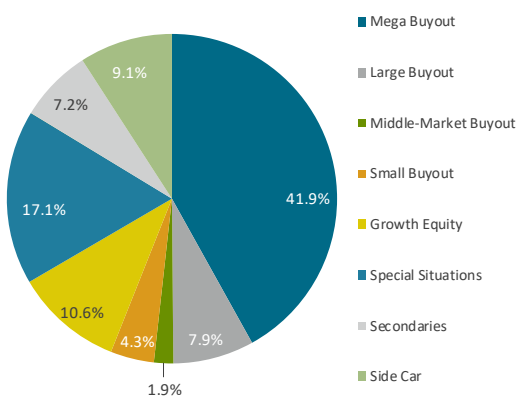
Year to Date Cash Flow Activity

During the three months ended March 31, 2021, the Portfolio made US\$35.5 million of contributions and received US\$50.2 million of distributions, for a net cash inflow of US\$14.7 million, compared to a net cash inflow of US\$0.9 million during the same period in the prior year. The graph below illustrates cash flow activity since inception by calendar year.

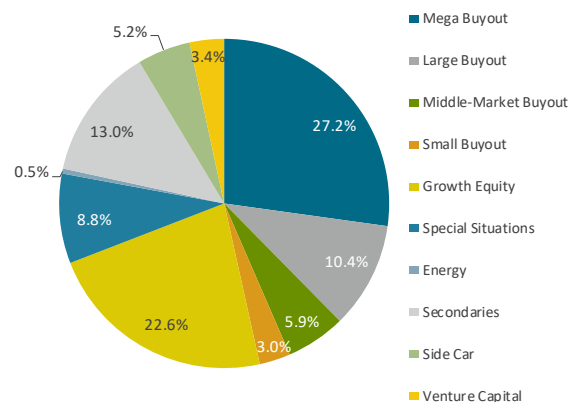


Buyout funds were the most active in terms of cash flow activity during 2021. Buyout funds drew down US\$19.9 million, or 56.0% of total contributions during 2021, and distributed US\$23.3 million, or 46.5% of total distributions during 2021.

2021 Total Contributed by Sub-Strategy

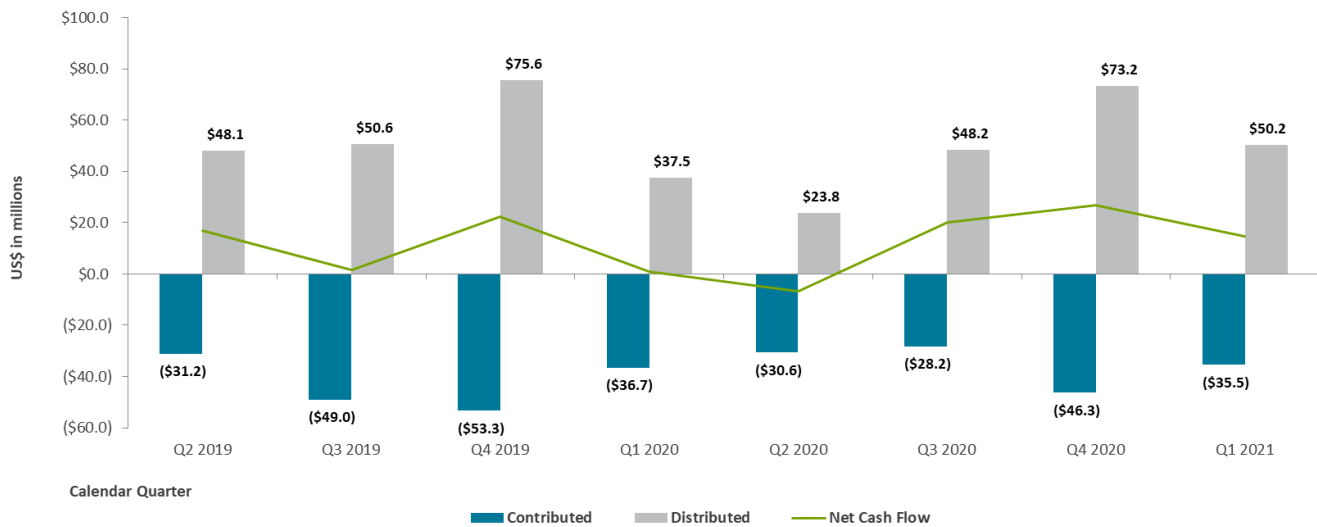


2021 Total Distributed by Sub-Strategy



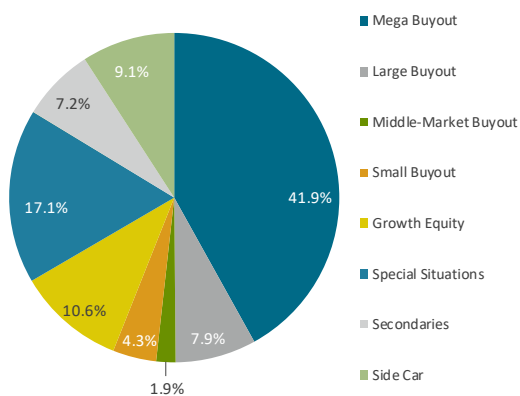
Quarterly Cash Flow Activity

During the first quarter of 2021, the Portfolio made US\$35.5 million of contributions and received US\$50.2 million of distributions, for a net cash inflow of US\$14.7 million. The graph below illustrates recent cash flow activity by quarter.

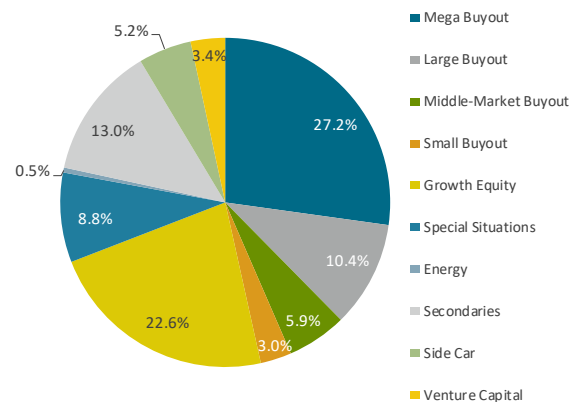


Buyout funds were the most active in terms of cash flow activity during the first quarter of 2021. Buyout funds drew down US\$19.9 million, or 56.0% of total contributions during the quarter, and distributed US\$23.3 million, or 46.5% of total distributions during the quarter.

Q1 2021 Total Contributed by Sub-Strategy

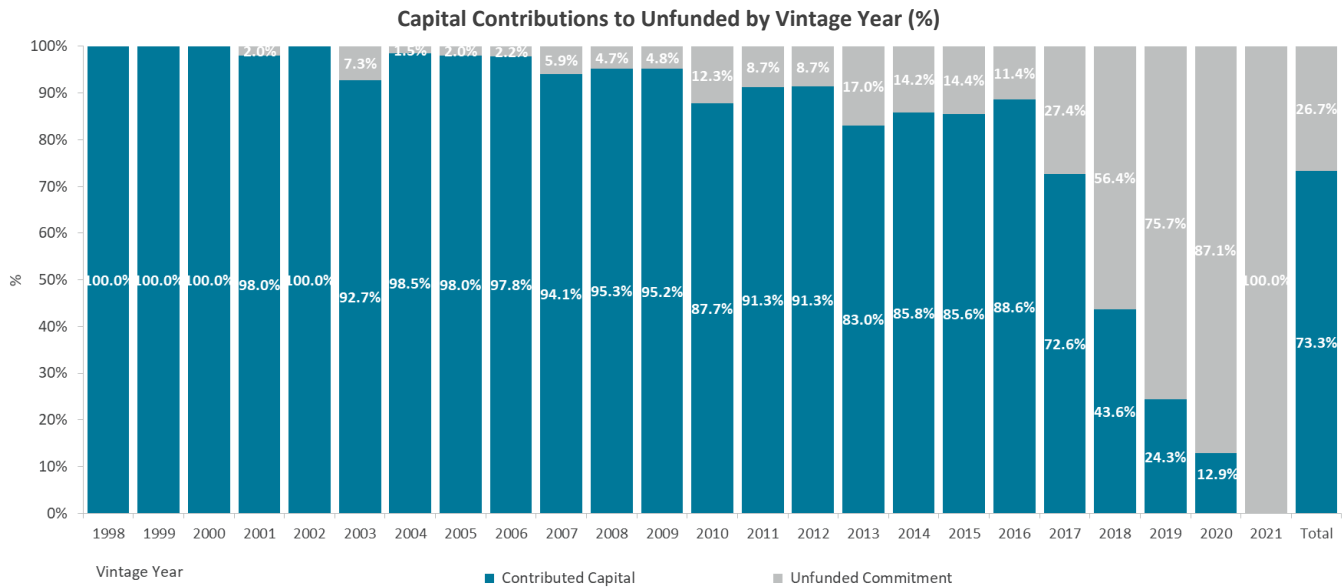


Q1 2021 Total Distributed by Sub-Strategy

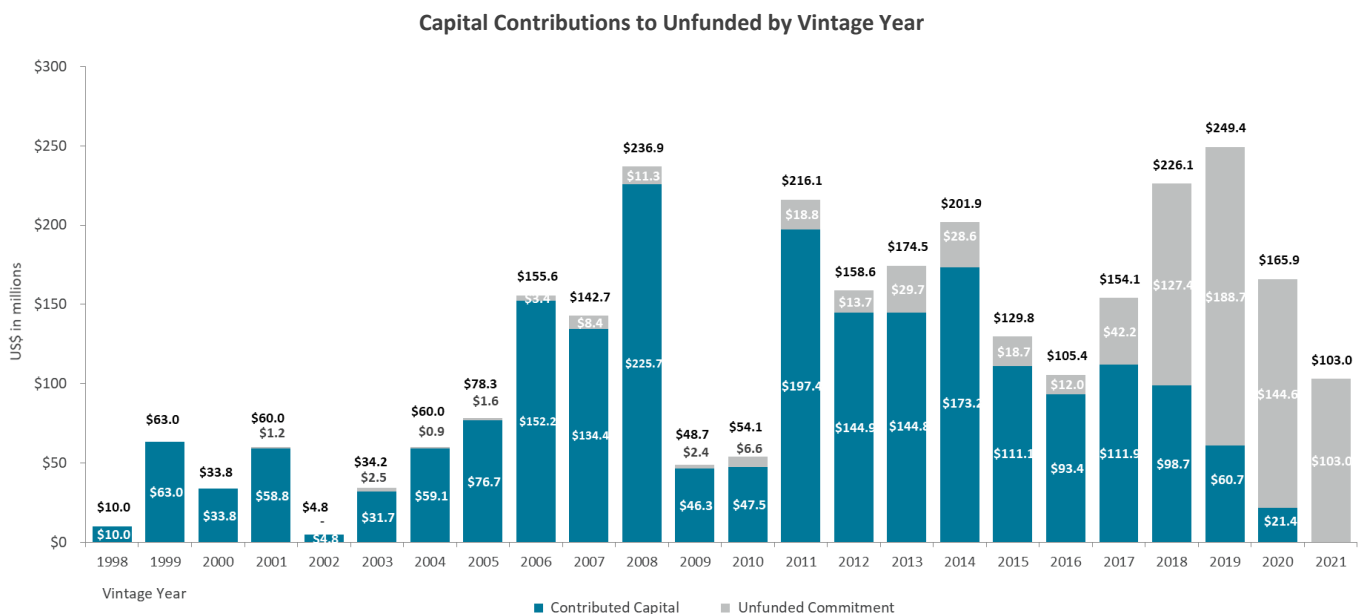


Invested Capital by Vintage Year

The following chart illustrates cumulative net capital contributions as a percentage of total capital commitments, by fund vintage year, as of March 31, 2021.



The following chart illustrates cumulative net capital contributions relative to unfunded commitment, by fund vintage year, as of March 31, 2021.



Portfolio Company-Level Analysis

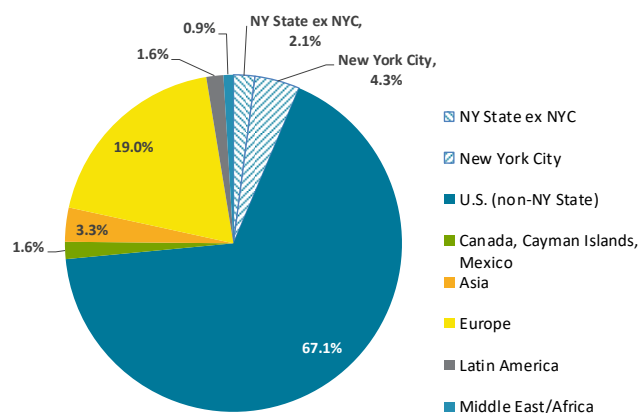
Geographic Exposure

The following charts illustrate the Portfolio's total investment cost and current market value exposure by geography at the portfolio company level as of March 31, 2021. Please note that the geography is based upon the corporate headquarters of each portfolio company.

Geographic Exposure by Total Cost

As of March 31, 2021 (US\$ in millions)

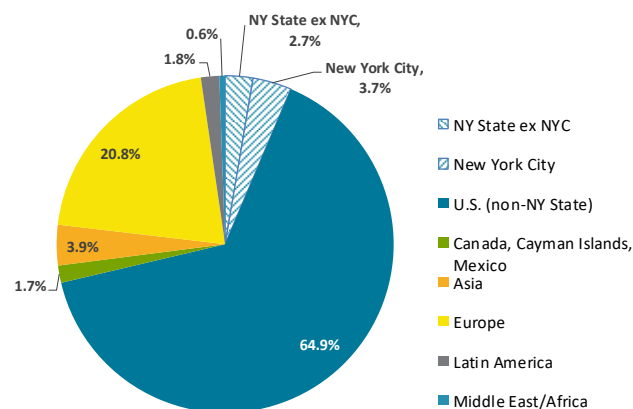
	Sum of Total Cost	% of Total
North America	\$1,417.8	75.1%
New York	120.2	6.4%
NY State ex NYC	38.7	2.1%
New York City	81.5	4.3%
U.S. (non-NY State)	1,266.6	67.1%
Canada, Cayman Islands, Mexico	31.0	1.6%
Asia	61.7	3.3%
Europe	358.5	19.0%
Latin America	30.9	1.6%
Middle East/Africa	17.9	0.9%
Total	\$1,886.7	100.0%



Geographic Exposure by Current Market Value

As of March 31, 2021 (US\$ in millions)

	Sum of Current Market Value	% of Total
North America	\$1,082.0	73.0%
New York	94.6	6.4%
NY State ex NYC	39.5	2.7%
New York City	55.1	3.7%
U.S. (non-NY State)	962.9	64.9%
Canada, Cayman Islands, Mexico	24.5	1.7%
Asia	57.6	3.9%
Europe	308.9	20.8%
Latin America	26.0	1.8%
Middle East/Africa	8.2	0.6%
Total*	\$1,482.8	100.0%

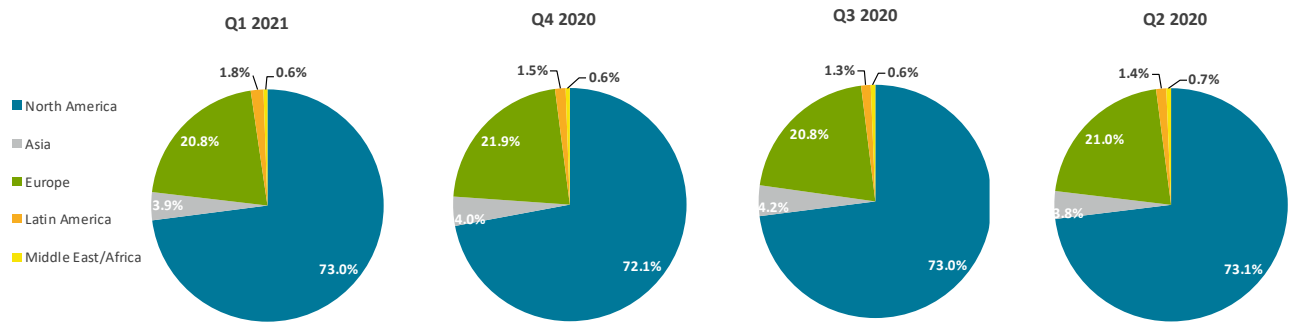


* Total portfolio company market value will not equal the Portfolio's market value due to a fund's cash holding and rounding estimates.

Geographic Exposure

The following charts illustrate the Portfolio's current exposure by geography at the portfolio company level for the most recent four quarters. Please note that the geography is based upon the corporate headquarters of each portfolio company.

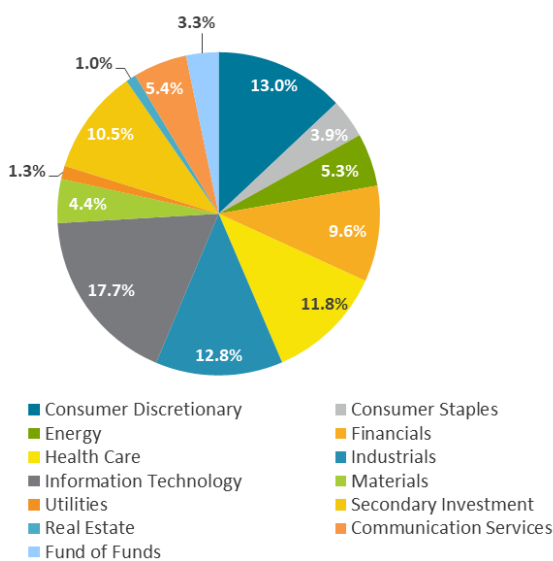
Geographic Exposure by Current Market Value



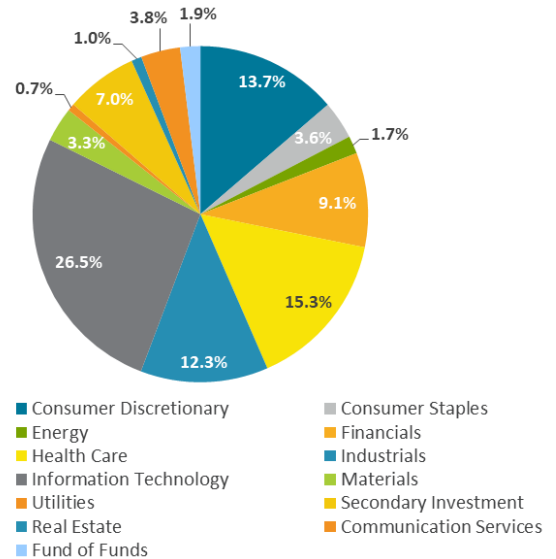
Industry Exposure

The following charts illustrate the Portfolio's total investment cost and current market value exposure by industry at the portfolio company level as of March 31, 2021. Please note that the Financials category includes investments in various debt securities.

Industry Exposure by Total Cost



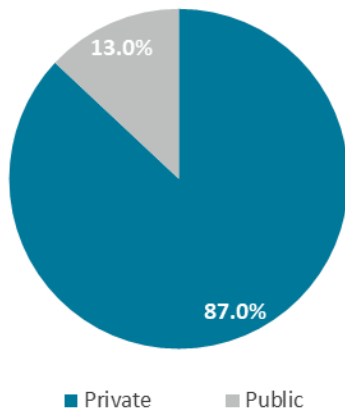
Industry Exposure by Current Market Value



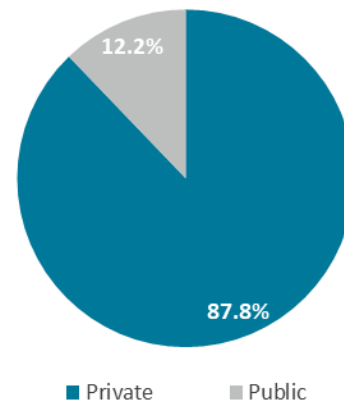
Public Market Exposure

As of quarter-end, publicly traded investments comprised 13.0% of the Portfolio’s total investment cost and 12.2% of the Portfolio’s exposed market value. The following charts illustrate the current public market exposure at the portfolio company level.

Public Market Exposure by Total Cost



Public Market Exposure Current Market Value



IV. Appendix

New York City Fire Pension Fund
Private Equity Portfolio
As of March 31, 2021 (in USD)

Vintage Year	Investment	First Drawdown	Committed Capital	Contributed Capital	Distributed Capital	Market Value	Multiple	IRR ¹	PME Return ²	PME Spread ³
Active Investments										
1999	Cypress Merchant Banking Partners II, L.P.	3/29/1999	\$ 22,586,486	\$ 26,972,134	\$ 25,292,077	\$ 11,183	0.94x	(1.2%)	5.5%	(6.7%)
1999	Lincolnshire Equity Fund II, L.P.	10/20/1999	6,899,005	7,223,050	14,158,254	126,110	1.98x	24.6%	7.0%	17.6%
2000	SCP Private Equity Partners II, L.P.	6/15/2000	15,000,000	16,834,296	6,514,303	971,784	0.44x	(9.4%)	5.7%	(15.0%)
2001	Apollo Investment Fund V, L.P.	4/13/2001	15,000,000	23,379,009	46,122,367	128,930	1.98x	38.8%	8.3%	30.4%
2001	CVC European Equity Partners III, L.P.	9/4/2001	10,000,000	11,880,366	29,775,858	641,580	2.56x	41.0%	10.9%	30.1%
2003	FS Equity Partners V, L.P.	1/20/2003	10,000,000	8,567,981	16,744,589	906,426	2.06x	15.4%	5.2%	10.2%
2003	Blackstone Capital Partners IV, L.P.	2/26/2003	13,875,989	17,172,972	41,853,940	343,134	2.46x	36.3%	8.5%	27.8%
2003	Ares Corporate Opportunities Fund, L.P.	4/1/2003	5,000,000	5,998,308	8,941,880	51,995	1.50x	13.1%	7.4%	5.7%
2004	Markstone Capital Partners, LP	1/30/2004	5,000,000	5,862,384	2,477,825	34,027	0.43x	(34.5%)	10.3%	(44.8%)
2004	FdG Capital Partners II LP	8/30/2004	5,000,000	5,387,768	6,421,816	98,649	1.21x	3.6%	6.8%	(3.1%)
2004	Lincolnshire Equity Fund III, L.P.	10/1/2004	5,000,000	5,000,631	7,113,293	1,646,766	1.75x	27.6%	12.2%	15.4%
2004	Yucaipa American Alliance Fund I, LP	10/1/2004	5,000,000	7,491,869	8,800,690	45,739	1.18x	4.0%	10.7%	(6.7%)
2004	New York/Fairview Emerging Managers Fund, L.P.-Tranche 1	10/21/2004	2,000,000	2,053,879	2,119,833	146,591	1.10x	1.6%	8.7%	(7.1%)
2004	Medica III Investments (International) L.P.	8/21/2006	3,000,000	2,992,836	1,267,948	585,000	0.62x	(8.3%)	(5.4%)	(2.9%)
2005	Palladium Equity Partners III, L.P.	11/12/2004	10,000,000	10,572,813	20,070,680	74,765	1.91x	15.4%	11.5%	3.9%
2005	New Mountain Partners II, L.P.	1/12/2005	2,580,650	2,337,304	4,502,540	27,305	1.94x	13.6%	4.4%	9.2%
2005	Snow Phipps Group, L.P.	9/7/2005	5,000,000	6,124,792	5,228,654	2,325,014	1.23x	4.4%	11.7%	(7.3%)
2005	FirstMark Capital I, L.P. (fka FirstMark IV)	11/21/2005	1,500,000	1,639,064	9,476,836	6,156,399	9.54x	34.2%	11.9%	22.4%
2005	USPF II Institutional Fund, L.P.	11/23/2005	5,000,000	6,594,940	7,688,280	592,686	1.26x	3.8%	7.8%	(4.0%)
2005	JP Morgan Fleming (Tranche A)	12/21/2005	3,000,000	3,023,398	3,313,231	779,903	1.35x	5.3%	11.0%	(5.8%)
2005	Arlington Capital Partners II, L.P.	4/20/2006	4,000,000	4,069,527	7,137,350	7,174	1.76x	11.2%	6.8%	4.5%
2006	Aisling Capital II, LP	1/12/2006	1,000,000	1,178,021	1,141,279	32,044	1.00x	(0.1%)	7.7%	(7.8%)
2006	Terra Firma Capital Partners III, L.P.	3/8/2006	5,223,559	5,298,700	2,388,640	20,712	0.45x	(9.3%)	10.0%	(19.3%)
2006	Blackstone Capital Partners V, L.P.	4/13/2006	9,448,250	10,060,754	16,240,726	256,620	1.64x	8.0%	8.4%	(0.4%)
2006	Apollo Investment Fund VI, L.P.	5/10/2006	20,000,000	25,741,832	38,519,613	379,065	1.51x	8.7%	7.6%	1.1%
2006	Ares Corporate Opportunities Fund II, L.P.	5/23/2006	5,000,000	5,476,087	9,138,855	6,426	1.67x	13.1%	3.8%	9.3%
2006	Euro Choice III L.P.	11/21/2006	5,313,432	5,347,612	6,025,938	179,016	1.16x	2.9%	12.0%	(9.1%)
2006	Thomas, McNeerney & Partners II, L.P.	11/29/2006	3,000,000	3,035,394	6,611,246	259,533	2.26x	16.6%	11.7%	4.9%
2006	Catterton Partners VI, L.P.	12/14/2006	5,000,000	5,693,763	9,218,897	1,608,111	1.90x	11.5%	9.2%	2.3%
2006	First Reserve Fund XI, L.P.	12/14/2006	5,000,000	5,313,265	3,462,114	53,018	0.66x	(9.5%)	6.7%	(16.2%)
2006	Permira IV, L.P.	12/14/2006	5,491,709	6,016,234	8,822,843	902,928	1.62x	8.9%	9.6%	(0.7%)
2006	Arsenal Capital Partners II, LP	12/18/2006	4,000,000	4,986,154	9,557,955	40,104	1.92x	12.1%	11.8%	0.3%
2006	GF Capital Private Equity Fund, L.P.	12/18/2006	3,000,000	3,076,007	4,058,641	1,362,039	1.76x	11.2%	12.2%	(0.9%)
2006	RRE Ventures IV, L.P.	12/19/2006	2,500,000	3,180,708	2,544,869	4,503,753	2.22x	9.5%	11.8%	(2.3%)
2006	Collier International Partners V, L.P.	12/21/2006	5,000,000	4,372,182	5,832,594	178,983	1.37x	7.6%	10.7%	(3.1%)
2006	MidOcean Partners III, L.P.	12/21/2006	9,705,796	11,617,278	23,524,659	1,588,939	2.16x	13.3%	10.0%	3.4%
2006	The Fourth Cnven Fund	1/22/2007	2,725,297	2,870,280	4,124,333	1,921	1.44x	7.3%	7.5%	(0.2%)
2006	Falconhead Capital Partners II, L.P.	3/23/2007	4,000,000	4,481,396	4,478,251	909,946	1.20x	3.3%	8.6%	(5.3%)
2006	Atlantic Equity Partners IV, L.P.	10/30/2007	3,768,757	3,663,425	719,154	3,875,719	1.25x	2.2%	10.2%	(8.0%)
2007	Pegasus Partners IV, L.P.	1/29/2007	7,500,000	9,112,510	6,900,231	1,453,705	0.92x	(1.6%)	11.3%	(12.9%)
2007	Olympus Capital Asia III, L.P.	1/31/2007	5,000,000	5,851,116	3,005,408	842,762	0.66x	(9.2%)	11.1%	(20.3%)
2007	FTVentures III, LP	3/1/2007	2,500,000	2,743,841	5,452,899	760,863	2.26x	15.6%	10.5%	5.1%
2007	Highland Consumer Fund I LP	3/16/2007	2,000,000	2,003,212	1,224,131	328,998	0.78x	(3.3%)	10.9%	(14.2%)
2007	Montreux Equity Partners IV, L.P.	3/27/2007	5,000,000	5,000,000	2,761,158	4,080,948	1.37x	4.2%	10.9%	(6.7%)
2007	Gleacher Mezzanine Fund II, L.P.	3/30/2007	3,000,000	2,752,429	3,651,296	35,083	1.34x	10.6%	12.1%	(1.5%)
2007	SCP Vitalife Partners II Fund	4/13/2007	5,000,000	5,024,924	395	1,296,984	0.26x	(12.9%)	4.1%	(17.1%)
2007	Constellation Venture Capital III, L.P.	5/22/2007	5,000,000	5,765,313	2,904,086	2,100,709	0.87x	(2.0%)	15.4%	(17.3%)
2007	United States Power Fund III, L.P.	6/28/2007	5,000,000	5,915,665	6,111,963	1,324,852	1.26x	3.9%	9.7%	(5.8%)
2007	Carlyle Partners V, L.P.	7/6/2007	10,000,000	10,340,844	17,369,896	1,197,268	1.80x	13.6%	11.1%	2.6%
2007	PCG Clean Energy & Technology Fund (East), LLC	7/6/2007	10,000,000	9,047,736	2,660,473	824,372	0.39x	(12.0%)	12.9%	(25.0%)
2007	GSO Capital Opportunities Fund LP	7/16/2007	7,500,000	11,229,550	15,937,873	111,060	1.43x	17.3%	10.1%	7.2%
2007	New Mountain Partners III, L.P.	8/9/2007	10,000,000	10,228,555	17,524,219	7,450,712	2.44x	14.7%	13.1%	1.6%
2007	Vista Equity Partners Fund III, L.P.	10/3/2007	7,500,000	8,064,983	19,154,991	622,088	2.45x	26.8%	9.9%	16.9%
2007	Trilantic Capital Partners IV L.P.	10/22/2007	7,236,332	7,554,273	11,334,907	392,854	1.55x	13.1%	10.9%	2.2%
2007	Pine Brook Capital Partners, L.P.	1/11/2008	7,500,000	8,517,075	10,609,787	457,588	1.30x	7.0%	12.0%	(5.1%)
2007	Princeton Capital Corp. (fka Capital Point)	10/17/2008	3,000,000	3,497,432	2,267,271	781,978	0.87x	(2.8%)	15.7%	(18.5%)
2007	Post Capital Equity Partners II LP	2/10/2009	3,000,000	2,163,355	4,081,000	483,666	2.11x	15.2%	16.1%	(0.9%)
2008	Paladin III (NY City), L.P.	1/8/2008	7,500,000	10,444,540	18,210,368	9,660,625	2.67x	15.5%	12.8%	2.7%
2008	Apollo Investment Fund VII, L.P.	1/28/2008	25,000,000	30,668,979	50,545,274	1,924,015	1.71x	22.5%	13.8%	8.7%
2008	NGN BioMed Opportunity II, L.P.	2/11/2008	5,000,000	4,787,955	3,336,553	2,353,614	1.19x	2.4%	15.2%	(12.8%)
2008	Riverstone/Carlyle Global Energy & Power Fund IV, L.P.	3/3/2008	7,500,000	8,636,195	8,871,839	409,646	1.07x	1.9%	13.9%	(12.0%)
2008	Yucaipa American Alliance Fund II, LP	3/28/2008	15,000,000	20,587,385	21,693,382	12,794,694	1.68x	8.6%	12.9%	(4.3%)
2008	Levine Leichtman Capital Partners IV, L.P.	4/8/2008	5,000,000	5,353,601	8,479,347	704,924	1.72x	18.3%	14.4%	3.9%

**New York City Fire Pension Fund
Private Equity Portfolio
As of March 31, 2021 (in USD)**

Vintage Year	Investment	First Drawdown	Committed Capital	Contributed Capital	Distributed Capital	Market Value	Multiple	IRR ¹	PME Return ²	PME Spread ³
2008	New York/Fairview Emerging Managers Fund, L.P.-Tranche 2	5/28/2008	5,000,000	5,065,974	9,845,112	4,988,187	2.93x	19.7%	13.8%	5.9%
2008	Yucaipa Corporate Initiatives Fund II, LP	6/23/2008	4,676,976	4,592,705	2,742,407	1,257,539	0.87x	(1.9%)	12.4%	(14.3%)
2008	CVC European Equity Partners V, L.P.	7/21/2008	13,654,378	14,796,154	28,531,266	591,319	1.97x	16.4%	12.8%	3.6%
2008	GI Partners Fund III L.P.	7/29/2008	7,500,000	8,086,843	12,702,734	20,108	1.57x	13.0%	15.3%	(2.3%)
2008	Ares Corporate Opportunities Fund III, L.P.	7/30/2008	10,000,000	12,252,779	25,914,676	708,886	2.17x	20.5%	12.2%	8.3%
2008	GCM Grosvenor NYCDFPF Emerging Manager Fund, L.P.	8/22/2008	8,979,798	11,822,110	11,205,129	5,437,066	1.41x	8.9%	14.1%	(5.3%)
2008	First Reserve Fund XII, L.P.	8/25/2008	5,000,000	5,554,103	2,817,426	280,327	0.56x	(14.2%)	17.1%	(31.3%)
2008	Landmark Equity Partners XIV, L.P.	9/19/2008	13,630,000	13,292,742	15,530,814	2,242,001	1.34x	9.6%	14.8%	(5.2%)
2008	Crestview Partners II, L.P.	10/1/2008	7,500,000	8,938,561	12,338,084	4,343,322	1.87x	14.1%	14.9%	(0.8%)
2008	Milestone Partners III, L.P.	10/17/2008	3,000,000	3,237,896	2,791,270	213,092	0.93x	(1.4%)	14.5%	(15.9%)
2008	Euro Choice IV L.P.	10/22/2008	6,475,312	6,023,874	6,882,389	1,756,900	1.43x	6.9%	13.6%	(6.7%)
2008	Avista Capital Partners II, L.P.	11/5/2008	10,000,000	13,150,800	20,608,240	777,833	1.63x	14.4%	14.8%	(0.5%)
2008	Bridgepoint Europe IV	11/14/2008	6,657,724	6,871,685	9,131,924	1,190,001	1.50x	9.5%	15.0%	(5.4%)
2008	Blue Wolf Capital Fund II, L.P.	11/19/2008	3,000,000	3,317,104	5,475,256	65,083	1.67x	10.6%	15.8%	(5.2%)
2008	Aisling Capital III, LP	11/20/2008	3,500,000	3,948,349	9,303,691	37,395	2.37x	26.0%	14.3%	11.8%
2008	Onex Partners III LP	12/10/2008	5,000,000	5,484,081	7,508,754	1,359,961	1.62x	11.4%	15.2%	(3.9%)
2009	NorthBound Emerging Manager Custom Fund LP	1/29/2009	5,000,000	4,366,772	6,146,330	876,342	1.61x	12.0%	14.7%	(2.7%)
2009	Welsh, Carson, Anderson & Stowe XI, L.P.	2/10/2009	7,500,000	7,500,000	10,303,259	2,069,101	1.65x	11.7%	15.1%	(3.4%)
2009	Scale Venture Partners III, LP	5/1/2009	5,000,000	4,981,767	12,750,882	1,173,653	2.80x	22.7%	14.0%	8.7%
2009	FS Equity Partners VI, L.P.	7/27/2009	12,500,000	12,597,736	34,682,785	4,927,943	3.14x	23.8%	15.0%	8.8%
2009	Lincolnshire Equity Fund IV, L.P.	8/5/2009	2,500,000	2,692,772	3,103,753	821,965	1.46x	8.8%	13.9%	(5.1%)
2009	Lexington Capital Partners VII, L.P.	12/3/2009	10,000,000	8,923,109	12,316,139	2,187,335	1.63x	14.0%	14.6%	(0.6%)
2010	Snow Phipps II, L.P.	1/8/2010	7,500,000	9,040,913	8,154,530	4,169,044	1.36x	8.3%	14.4%	(6.1%)
2010	Trident V, L.P.	4/29/2010	15,000,000	17,584,418	20,978,448	9,829,859	1.75x	11.6%	13.3%	(6.1%)
2010	Comvest Investment Partners IV, L.P.	10/21/2010	20,000,000	20,837,763	33,191,367	4,513,280	1.81x	28.5%	14.6%	13.9%
2011	Blackstone Capital Partners VI, L.P.	1/24/2011	10,000,000	10,701,032	11,628,390	6,690,744	1.71x	12.7%	13.3%	(0.6%)
2011	Ampersand 2011	3/11/2011	5,000,000	5,000,000	16,193,623	136,374	3.27x	21.9%	13.0%	8.9%
2011	BDCM Opportunity Fund III, L.P.	4/8/2011	10,000,000	14,702,051	9,638,954	12,023,971	1.47x	8.3%	13.9%	(5.6%)
2011	AXA Secondary Fund V B L.P.	6/16/2011	40,000,000	32,956,743	52,565,618	258,827	1.60x	15.4%	14.8%	0.7%
2011	Wellspring Capital Partners V, L.P.	7/1/2011	7,500,000	7,904,533	10,712,066	2,456,180	1.67x	15.7%	12.8%	2.9%
2011	EQT VI, L.P.	8/1/2011	17,680,087	18,897,186	26,829,718	5,403,865	1.71x	13.4%	12.8%	0.6%
2011	Pegasus Partners V, L.P.	8/16/2011	6,236,975	7,858,593	6,767,956	5,089,523	1.51x	9.6%	15.2%	(5.6%)
2011	BC European Capital IX	9/19/2011	21,816,135	24,710,443	24,449,952	26,360,323	2.06x	16.6%	14.6%	2.1%
2011	American Securities Partners VI, L.P.	11/18/2011	20,000,000	22,194,553	33,319,909	15,029,239	2.18x	22.6%	14.0%	8.5%
2011	Vista Equity Partners Fund IV, L.P.	11/30/2011	30,000,000	31,042,084	39,499,194	19,764,501	1.91x	15.7%	14.4%	1.3%
2012	Warburg Pincus Private Equity XI, L.P.	5/24/2012	35,000,000	36,922,958	42,168,696	20,838,825	1.71x	13.2%	13.6%	(0.4%)
2012	Summit Partners Growth Equity Fund VIII-A, L.P.	6/14/2012	30,000,000	34,309,073	62,934,055	20,250,209	2.42x	27.6%	13.3%	14.2%
2012	NYCFFP - 2012 Emerging Manager Program ⁴	6/21/2013	22,700,000	23,689,891	19,634,278	31,457,175	2.16x	20.4%	14.3%	6.2%
2012	Trilantic Capital Partners V L.P.	9/20/2012	10,000,000	11,072,685	11,288,619	6,047,400	1.57x	16.0%	13.9%	2.1%
2012	Palladium Equity Partners IV, L.P.	10/10/2012	10,000,000	9,836,601	4,888,221	8,766,693	1.39x	9.1%	15.4%	(6.2%)
2012	Ares Corporate Opportunities Fund IV, L.P.	11/5/2012	20,000,000	21,309,421	26,607,874	12,890,063	1.85x	15.7%	12.7%	2.9%
2012	Green Equity Investors VI, L.P.	11/30/2012	25,000,000	27,485,315	20,720,869	30,829,696	1.88x	15.2%	14.1%	1.1%
2011	Platinum Equity Capital Partners III, L.P.	1/14/2013	25,000,000	21,418,242	40,077,538	7,038,274	2.20x	36.9%	13.9%	23.0%
2013	Carlyle Partners VI, L.P.	7/3/2013	20,000,000	21,451,915	13,208,725	26,129,830	1.83x	16.6%	14.2%	2.4%
2014	Carlyle Partners VI, L.P. (Side Car)	9/23/2014	2,200,000	1,602,271	753,382	2,547,138	2.06x	15.3%	14.7%	0.6%
2013	Landmark Equity Partners XV, L.P.	10/30/2013	26,000,000	20,871,107	16,080,118	12,965,526	1.39x	13.4%	13.7%	(0.3%)
2013	Landmark - NYC Fund I, L.P.	12/24/2013	9,000,000	8,202,166	6,938,907	6,335,184	1.62x	16.1%	12.3%	3.8%
2013	Apollo Investment Fund VIII, L.P.	12/11/2013	40,000,000	37,846,567	23,406,352	34,817,905	1.54x	12.5%	14.7%	(2.1%)
2014	CVC Capital Partners VI, L.P.	2/18/2014	35,214,627	36,413,398	17,952,244	44,812,122	1.72x	16.8%	15.0%	1.8%
2013	Crestview Partners III, L.P.	3/3/2015	24,000,000	19,458,088	10,718,817	17,499,727	1.45x	13.7%	15.6%	(1.9%)
2014	Crestview Partners III (Co-Investment B), L.P.	12/17/2015	8,000,000	8,284,349	394,887	8,983,414	1.13x	3.4%	17.4%	(14.0%)
2014	Olympus Growth Fund VI, L.P.	1/24/2014	15,000,000	14,302,574	9,154,163	12,256,907	1.50x	13.9%	15.3%	(1.4%)
2013	ASF VI B L.P.	5/9/2014	30,000,000	24,228,369	30,330,387	4,584,945	1.44x	12.3%	12.6%	(0.3%)
2014	ASF VI B NYC Co-Invest L.P.	5/9/2014	10,000,000	8,377,475	9,609,074	3,402,449	1.55x	14.2%	10.7%	3.4%
2014	Vista Equity Partners Fund V, L.P.	9/8/2014	40,000,000	49,175,228	47,994,410	51,436,433	2.02x	21.2%	13.8%	7.4%
2014	Lexington Capital Partners VIII, L.P.	1/8/2015	40,000,000	36,322,254	25,466,703	30,419,172	1.54x	19.0%	15.5%	3.5%
2015	Siris Partners III, L.P.	5/4/2015	5,500,000	5,746,976	3,069,965	5,239,994	1.45x	14.7%	15.2%	(0.5%)
2015	Centerbridge Capital Partners III, L.P.	5/21/2015	4,200,000	4,744,225	2,556,755	4,808,938	1.55x	20.0%	16.2%	3.8%
2015	Welsh, Carson, Anderson & Stowe XII, L.P.	8/26/2015	14,000,000	13,153,378	11,566,660	18,598,327	2.29x	32.3%	16.7%	15.6%
2015	Warburg Pincus Private Equity XII, L.P.	12/21/2015	36,000,000	35,989,645	11,728,268	47,596,042	1.65x	18.6%	17.0%	1.6%
2015	ASF VII B L.P.	12/29/2015	17,000,000	9,511,514	5,061,828	9,075,445	1.49x	17.5%	19.0%	(1.5%)
2015	ASF VII B NYC Co-Invest L.P.	12/29/2015	9,000,000	5,551,996	3,600,598	5,545,791	1.65x	20.9%	15.0%	6.0%
2015	EQT VII, L.P.	1/8/2016	28,434,336	29,569,674	21,841,471	36,640,127	1.98x	26.4%	16.2%	10.1%
2016	American Securities Partners VII, L.P.	1/19/2016	14,000,000	13,279,242	2,207,226	14,999,838	1.30x	9.8%	17.7%	(7.9%)
2014	Bridgepoint Europe V L.P.	2/8/2016	11,431,629	10,633,493	6,920,851	11,239,470	1.71x	18.2%	16.2%	2.0%

**New York City Fire Pension Fund
Private Equity Portfolio
As of March 31, 2021 (in USD)**

Vintage Year	Investment	First Drawdown	Committed Capital	Contributed Capital	Distributed Capital	Market Value	Multiple	IRR ¹	PME Return ²	PME Spread ³
2015	Bridgepoint Europe V Co-Invest	8/16/2016	3,502,817	3,241,557	2,674,224	3,983,118	2.05x	25.8%	14.9%	10.9%
2015	NYCFPF - 2015 Emerging Manager Program ⁵	2/22/2016	29,750,000	21,765,548	4,533,505	30,688,785	1.62x	28.1%	20.7%	7.4%
2016	Vista Equity Partners Fund VI, L.P.	6/28/2016	28,000,000	31,398,929	17,383,319	40,699,941	1.85x	21.9%	16.8%	5.0%
2016	Platinum Equity Capital Partners IV, L.P.	3/21/2017	19,000,000	16,815,132	5,928,615	21,714,040	1.64x	24.0%	17.0%	6.9%
2018	Platinum Equity Capital Partners IV Co-Investment, L.P.	9/7/2018	3,000,000	2,104,085	418,633	2,617,141	1.44x	16.5%	14.2%	2.2%
2016	Apax IX USD, L.P.	5/12/2017	22,000,000	21,893,931	7,052,436	36,765,454	2.00x	33.3%	18.6%	14.7%
2017	Green Equity Investors VII, L.P.	5/12/2017	17,000,000	15,057,349	2,663,297	23,599,997	1.74x	25.1%	18.8%	6.2%
2017	Ares Corporate Opportunities Fund V, L.P.	6/22/2017	17,000,000	16,989,875	3,233,348	15,479,324	1.10x	5.0%	17.3%	(12.4%)
2017	KKR Americas Fund XII, L.P.	10/31/2017	28,000,000	18,156,554	1,973,155	35,356,077	2.06x	41.0%	20.3%	20.7%
2017	BC European Capital X	12/14/2017	15,981,192	14,174,185	264,680	20,563,769	1.47x	19.5%	19.1%	0.4%
2016	BCEC X Co-Investment	3/24/2017	6,412,474	6,440,670	40,396	11,949,911	1.86x	28.4%	19.3%	9.1%
2017	Warburg Pincus Financial Sector, L.P.	1/5/2018	21,000,000	16,762,272	1,071,000	20,631,055	1.29x	16.9%	22.6%	(5.8%)
2018	Platinum Equity Small Cap Fund, L.P.	6/27/2018	8,000,000	3,710,643	21,340	3,000,003	0.81x	(17.7%)	27.4%	(45.1%)
2018	EQT VIII, L.P.	8/10/2018	22,250,085	16,755,016	475,531	23,954,170	1.46x	32.4%	28.8%	3.6%
2018	EQT VIII Co-Investment	11/2/2018	8,103,284	4,348,796	-	6,236,233	1.43x	21.5%	22.0%	(0.5%)
2017	CVC Capital Partners VII, L.P.	12/4/2018	31,008,664	19,570,525	385,579	25,936,393	1.34x	23.5%	23.2%	0.4%
2017	Palladium Equity Partners V, L.P.	2/11/2019	6,666,667	3,498,318	38,436	3,690,279	1.07x	5.0%	29.8%	(24.7%)
2018	Vista Equity Partners Fund VII, L.P.	2/13/2019	35,500,000	21,538,016	82,748	22,837,710	1.06x	6.6%	24.0%	(17.3%)
2019	Welsh, Carson, Anderson & Stowe XIII, L.P.	3/14/2019	18,000,000	4,183,917	-	4,703,868	1.12x	17.6%	49.1%	(31.5%)
2018	Siris Partners IV, L.P.	3/15/2019	18,000,000	9,974,297	1,488,803	10,362,713	1.19x	12.2%	22.5%	(10.3%)
2018	Apollo Investment Fund IX, L.P.	3/15/2019	52,000,000	14,938,983	3,159,598	17,009,603	1.35x	26.8%	24.9%	1.9%
2018	ASF VIII B L.P.	3/15/2019	36,000,000	7,423,867	109,001	12,015,769	1.63x	56.3%	48.1%	8.3%
2019	ASF VIII B NYC Co-Invest L.P.	3/15/2019	18,000,000	1,221,134	-	2,713,648	2.22x	102.1%	26.7%	75.4%
2019	Warburg Pincus Global Growth, L.P.	3/26/2019	25,500,000	12,529,269	184,875	14,083,929	1.14x	16.8%	30.9%	(14.1%)
2018	Bridgepoint Europe VI	4/1/2019	24,229,426	9,656,647	1,866,919	9,713,899	1.20x	NM	NM	N/A
2019	Bridgepoint Europe VI Co-Invest	5/7/2019	6,108,391	3,573,608	-	4,021,861	1.13x	NM	NM	N/A
2019	Trilantic Capital Partners VI (North America) L.P.	8/8/2019	20,000,000	5,381,079	83,160	5,248,665	0.99x	NM	NM	N/A
2019	NYCFPF - 2019 Emerging Manager Program ⁶	9/25/2019	37,550,000	3,645,254	101,069	4,426,707	1.24x	NM	NM	N/A
2019	Lexington Capital Partners IX	12/20/2019	21,375,000	7,455,240	1,490,440	9,767,702	1.51x	NM	NM	N/A
2019	Lexington IX Co-Invest	9/29/2020	7,125,000	2,221,931	-	2,957,036	1.33x	NM	NM	N/A
2019	Platinum Equity Capital Partners V, L.P.	12/27/2019	32,000,000	7,124,169	27,268	7,662,533	1.08x	NM	NM	N/A
2021	Platinum Equity Capital Partners V Co-Investment, L.P.	N/A	8,000,000	-	-	-	-	N/A	N/A	N/A
2019	KKR European Fund V (USD)	1/15/2020	17,650,000	7,460,720	291,112	7,287,606	1.02x	NM	NM	N/A
2020	FTV VI	3/18/2020	3,500,000	1,435,000	-	2,151,189	1.50x	NM	NM	N/A
2019	Lindsay Goldberg V	4/29/2020	18,000,000	3,328,418	742	3,638,124	1.09x	NM	NM	N/A
2019	Blackstone Capital Partners VIII L.P.	5/19/2020	22,500,000	2,411,725	-	2,630,945	1.09x	N/A	N/A	N/A
2020	Clearlake Capital Partners VI, L.P.	5/22/2020	11,000,000	5,337,235	91,725	5,948,909	1.13x	NM	NM	N/A
2020	Green Equity Investors VIII, L.P.	10/21/2020	22,500,000	3,035,397	-	2,756,433	0.91x	NM	NM	N/A
2020	Green Equity Investors VIII Coinvest N, L.P.	5/20/2020	7,500,000	3,156,064	-	3,139,760	0.99x	NM	NM	N/A
2019	Crestview Partners IV, L.P.	10/28/2020	14,000,000	757,902	-	2,159,759	2.85x	NM	NM	N/A
2019	Crestview Partners IV (Co-Investment), L.P.	10/28/2020	4,666,667	252,635	-	839,429	3.32x	NM	NM	N/A
2019	Apax X USD L.P.	11/10/2020	21,500,000	2,220,950	-	3,913,528	1.76x	NM	NM	N/A
2020	Valor Equity Partners V, L.P.	1/28/2021	5,500,000	1,964,611	-	2,591,911	1.32x	NM	NM	N/A
2020	EQT IX (No. 2) USD SCSP	2/5/2021	21,018,000	4,636,047	9,871	5,783,513	1.25x	NM	NM	N/A
2020	EQT IX Co-Investment	N/A	5,732,000	-	-	(24,497)	-	NM	NM	N/A
2020	Hg Genesis 9, L.P.	3/2/2021	11,989,505	88,384	-	425,589	4.82x	N/A	N/A	N/A
2020	BC Partners Fund XI	N/A	24,200,000	-	-	(165,284)	-	NM	NM	N/A
2021	BC Partners XI Metro Co-Investment L.P.	N/A	11,000,000	-	-	-	-	N/A	N/A	N/A
2021	CVC Capital Partners VIII, L.P.	N/A	41,045,752	-	-	-	-	N/A	N/A	N/A
2020	KKR Asian Fund IV SCSP	N/A	25,000,000	-	-	130,899	-	NM	NM	N/A
2020	NYC-NorthBound Emerging Managers Program LP	N/A	25,000,000	-	-	94,609	-	NM	NM	N/A
2021	One Rock Capital Partners III, L.P.	N/A	9,500,000	-	-	(68,757)	-	NM	NM	N/A
2021	Stellax Capital Partners II	N/A	12,000,000	-	-	-	-	N/A	N/A	N/A
2021	The Resolute Fund V, L.P.	N/A	16,500,000	-	-	(75,816)	-	NM	NM	N/A
Total Portfolio⁷			\$ 2,624,252,684	\$ 2,101,625,371	\$ 2,110,687,121	\$ 1,278,927,728	1.61x	12.3%	11.5%	0.9%

¹ Performance for funds with less than eight (8) quarters of activity is not meaningful.

² Russell 3000 PME+ or Long-Nickels PME for investments with no distributed capital as of quarter-end.

³ PME Spread is calculated as IRR minus PME Return.

⁴ NYCFPF - 2012 Emerging Manager Program includes the total commitment amount of \$23.7 million. The Program's original commitment amount of \$25.0 million was subsequently revised to \$23.7 million, all of which has been committed as of March 31, 2021. The remaining \$1.3 million was reallocated to the NYCFPF - 2015 Emerging Manager Program.

⁵ NYCFPF - 2015 Emerging Manager Program includes the total commitment amount of \$29.8 million. The Program's original commitment amount of \$31.3 million, which included the original \$30.0 million commitment and the \$1.3 million reallocation from the NYCFPF - 2012 Emerging Manager Program, was subsequently revised to \$29.8 million. As of March 31, 2021, all \$29.8 million has been committed, and the remaining \$1.6 million was reallocated to the NYCFPF - 2019 Emerging Manager Program.

⁶ NYCFPF - 2019 Emerging Manager Program commitment amount totals \$37.6 million, which includes the Program's original \$36.0 million commitment and the \$1.6 million reallocation from the NYCFPF - 2015 Emerging Manager Program. As of March 31, 2021, \$12.5 million has been committed.

⁷ Total Portfolio includes liquidated investments.

Past performance is not necessarily indicative of future results and there can be no assurance that the fund will achieve comparable results or avoid substantial losses.

The referenced indices are shown for general market comparisons and are not meant to represent any particular fund. An investor cannot directly invest in an index. Moreover, indices do not reflect commissions or fees that may be charged to an investment product based on the index, which may materially affect the performance data presented.

Note: IRRs presented are interim estimates and may not be indicative of the ultimate performance of fund investments due to a number of factors, such as the lack of industry valuation standards and the differences in the investment pace and strategy of various funds. Until a fund is liquidated, typically over 10 to 12 years, the IRR is only an interim estimated return. The IRR calculated in early years of a fund is not meaningful given the J-curve effect. The actual IRR performance of any fund is not known until all capital contributed and earnings have been distributed to the investor. The IRRs contained in this report are calculated by StepStone Group LP ("StepStone"), a consultant to the New York City Fire Pension Fund, based on information provided by the general partners (e.g. cash flows and valuations). The IRR calculations and other information contained in this report have not been reviewed or confirmed by the general partners. The result of the IRR calculation may differ from that generated by the general partner or other limited partners. Differences in IRR calculations can be affected by cash-flow timing, the accounting treatment of carried interest, fund management fees, advisory fees, organizational fees, other fund expenses, sale of distributed stock, and valuations. IRR and TVPI for certain vehicles may have been impacted by StepStone's or the underlying GP's use of subscription-backed credit facilities by such vehicles. Reinvested/recycled amounts increase contributed capital.

**New York City Fire Pension Fund
Subsequent Commitments
As of March 31, 2021 (in USD)**

Vintage Year	Investment	First Drawdown	Committed Capital	Contributed Capital	Distributed Capital	Market Value	Multiple	IRR ¹	PME Return ²	PME Spread ³
Commitments Closed Subsequent to as of Date										
2021	Providence Strategic Growth V L.P.	N/A	\$ 44,000,000	\$ -	\$ -	\$ -	N/A	N/A	N/A	N/A
2021	Vistria Fund IV, L.P.	N/A	11,000,000	-	-	-	N/A	N/A	N/A	N/A
2021	Harbourvest Centre Street Co-Investment Fund L.P.	N/A	39,000,000	-	-	-	N/A	N/A	N/A	N/A
2021	KKR Americas Fund XIII, L.P.	N/A	40,000,000	-	-	-	N/A	N/A	N/A	N/A
2021	Warburg Pincus Financial Sector II, L.P.	N/A	19,500,000	-	-	-	N/A	N/A	N/A	N/A
2021	Apax Digital Fund II	N/A	12,000,000	-	-	-	N/A	N/A	N/A	N/A
Total Commitments Closed Subsequent to as of Date			\$ 165,500,000	\$ -	\$ -	\$ -	N/A	N/A	N/A	N/A

¹ Performance for funds with less than eight (8) quarters of activity is not meaningful.

² Russell 3000 PME+ or Long-Nickels PME for investments with no distributed capital as of quarter-end.

³ PME Spread is calculated as IRR minus PME Benchmark.

Note: IRRs presented are interim estimates and may not be indicative of the ultimate performance of fund investments due to a number of factors, such as the lack of industry valuation standards and the differences in the investment pace and strategy of various funds. Until a fund is liquidated, typically over 10 to 12 years, the IRR is only an interim estimated return. The IRR calculated in early years of a fund is not meaningful given the J-curve effect. The actual IRR performance of any fund is not known until all capital contributed and earnings have been distributed to the investor. The IRRs contained in this report are calculated by StepStone Group LP ("StepStone"), a consultant to the New York City Fire Pension Fund, based on information provided by the general partners (e.g. cash flows and valuations). The IRR calculations and other information contained in this report have not been reviewed or confirmed by the general partners. The result of the IRR calculation may differ from that generated by the general partner or other limited partners. Differences in IRR calculations can be affected by cash-flow timing, the accounting treatment of carried interest, fund management fees, advisory fees, organizational fees, other fund expenses, sale of distributed stock, and valuations. IRR and TVPI for certain vehicles may have been impacted by StepStone's or the underlying GPs' use of subscription-backed credit facilities by such vehicles. Reinvested/recycled amounts increase contributed capital.

Real Estate Quarterly Report (Public):

The New York City Fire Department Pension Fund

Executive Summary: First Quarter 2021 Performance Measurement Report Real Estate

Portfolio Profile

The New York City Fire Department Pension Fund has allocated 7.0% of the total plan to Real Estate. The Real Estate Portfolio's objective is to generate a total net return that exceeds the NFI-ODCE+100 bps total net return measured over full market cycles.

Portfolio Statistics (March 31, 2021)

Total Plan Assets	\$18.0 billion
Target Real Estate Allocation (%)	7%
Target Real Estate Allocation (\$)	\$1.3 billion
Total Real Estate Market Value	\$790.5 million
Real Estate Unfunded Commitments	\$310.1 million
Total Real Estate Exposure	\$1.1 billion
Number of Investments	81
Number of Managers	46

Net Returns (as of March 31, 2021)

1Q21 Time-Weighted Net Return:	3.3%
1 Year Time Weighted Net Return:	8.3%
3 Year Time Weighted Net Return:	5.9%
5 Year Time Weighted Net Return:	7.9%
Inception-to-Date (ITD) Time-Weighted:	7.2%
ITD Net IRR:	7.6%
ITD Net Equity Multiple:	1.4x

Investment Guidelines

Style Sector:	Target •3.0% Core/Core Plus •4.0% Non-Core
Benchmark	NFI-ODCE Index + 100 bps net over full market cycles
Region Diversification	Maximum 25% Int'l
Investment Diversification	Limit 15% to a single investment
Manager Diversification	Limit 20% to a single manager
Leverage	65%

First Quarter Investment Activity

During the Quarter, the Board approved commitments to KKR REPA III, Almanac Fund IX, and Almanac Fund IX Co-Investment for \$42 million, \$20 million, and \$10 million, respectively.

OVERVIEW

Global investment activity during the first quarter of 2021 was down significantly relative to 4Q20 and by 19% over the year compared to 2020. During 1Q21, transaction volumes recovered significantly in the APAC regions while the EU and US continued to experience significant depression. Through April of 2021, transaction volume was up by 60% YoY, after rebounding from a COVID-19 induced slowdown. Transaction volume has been the strongest in the apartment and industrial sectors.

Increased availability of the vaccine has driven an uptick in investor appetite, specifically in regions that were among the first to be affected by the virus such as APAC. Interest in the quarter was concentrated primarily in multifamily properties, as well as senior housing.

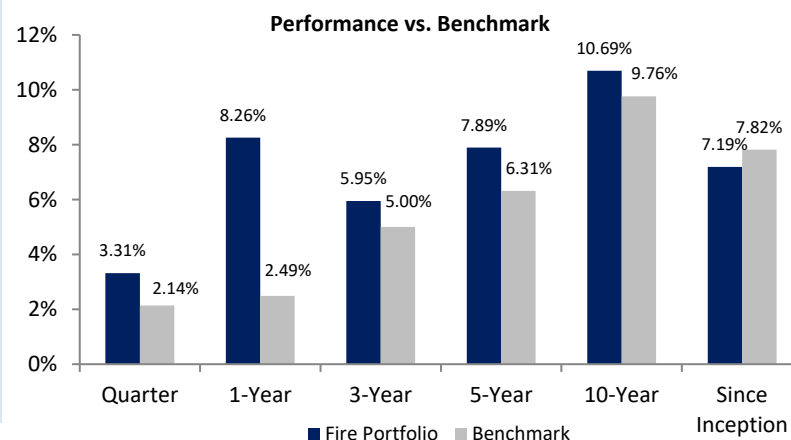
Investment activity in the Americas witnessed a sharp decline and fell by 38% year-over-year. Despite a slow down in COVID cases, the roll out of the vaccine hasn't helped spur investment to pre-COVID levels. Transaction volume in the US decreased 37% relative to 4Q20.

Global Total Commercial Real Estate Volume - 2020 - 2021

\$ US Billions	Q1 2021	Q1 2020	% Change Q1 21 - Q1 20	Full Year Ending 1Q21	Full Year Ending 1Q20	% Change Full Year
Americas	89	122	-27%	347	560	-38%
EMEA	64	85	-25%	293	396	-26%
Asia Pacific	123	128	-4%	786	802	-2%
Total	275	335	-18%	1426	1758	-19%

Source: Real Capital Analytics, Inc., Q1' 21

The New York City Fire Department Pension Fund ("Fire") Real Estate Portfolio is, and has been, well positioned to take advantage of conditions in the real estate marketplace. In the period reflected in the rolling ten-year net return, Fire performance outperforms the benchmark by 90 basis points. At the end of the First Quarter 2021, the Portfolio achieved a total gross return of 4.1% which was comprised of 1.0% income and 3.1% appreciation. The net return for the Quarter was 3.3%. A detailed analysis of the Portfolio's real estate performance is found later in this Executive Summary.



The New York City Fire Department Pension Fund

Executive Summary: First Quarter 2021 Performance Measurement Report Real Estate

FUNDING AND COMPOSITION

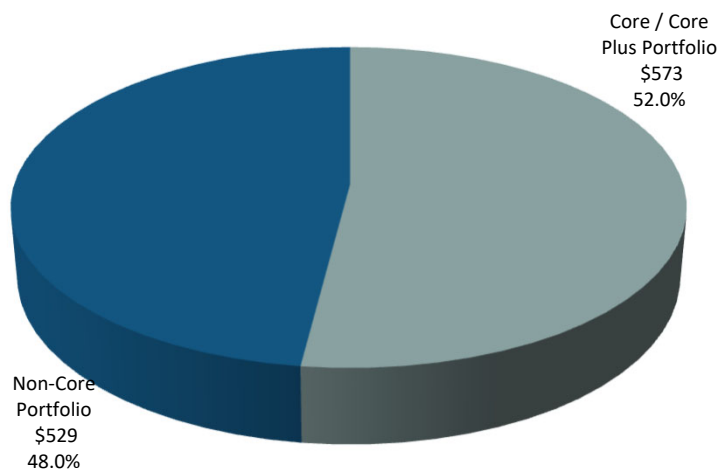
At the end of the First Quarter, the Portfolio was funded at \$790.5 million, or 4.4% of total plan assets. A total of \$311.0 million in unfunded commitments are still outstanding. Unfunded commitments are down from \$296.1 million as of the Fourth Quarter 2020.

New contributions for the Quarter totaled \$14.9 million, offset by \$15.9 million in distributions and withdrawals. Total distributions were slightly weighted to the Core/Core Plus sector.

Shown in the pie chart to the right is the current risk sector exposure calculated by Market Value + Unfunded Commitments. The Core / Core Plus component accounts for 52.0% of the Portfolio exposure during the Quarter. The Non-Core component accounts for 48.0% of the Portfolio exposure.

A more detailed break-down of the Portfolio Composition is shown in the table below. Attached as Exhibit A is a matrix which demonstrates compliance with various Investment Policy Statement guidelines.

Real Estate Exposure



New York City Fire Department Pension Fund		
Total Plan Assets	3/31/2021	17,992
Real Estate Allocation (%)		7.0
Real Estate Allocation (\$)		1,259
Real Estate Core Allocation (%)		3.0
Real Estate Core Allocation (\$)		539.8
Real Estate Non-Core Allocation (%)		4.0
Real Estate Non-Core Allocation (\$)		720
Style Sector Allocation		
Funded (Market Value) Core / Core Plus Portfolio (\$)		505
Funded (Market Value) Non-Core Portfolio (\$)		286
Unfunded Core / Core Plus Portfolio		68
Unfunded Non-Core Portfolio		243
Funded (Market Value) and Committed Statistics		
Core / Core Plus Portfolio (%)		52.0
Non-Core Portfolio (%)		48.0
Core / Core Plus Committed (\$)		573.0
Non-Core Committed (\$)		528.5
\$ Committed		1,102
% Committed on Real Estate Allocation		87.5
% Committed on Total Plan Assets		6.1
Funded (Market Value) Statistics		
% Core / Core Plus Funded (Market Value) of Total Plan Assets		2.8
% Non-Core Funded (Market Value) of Total Plan Assets		1.6
% Funded (Market Value) of Total Plan Assets		4.4
% Funded (Market Value) of Total Real Estate Allocation		62.8

The New York City Fire Department Pension Fund

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PERFORMANCE

During the Quarter under review, the Fire Real Estate Portfolio produced a 4.1% total gross return. The total net return for the Quarter was 3.3%. On a rolling one-year basis, the total gross return of 10.4% was recorded. On a net basis, the total return was 8.3%. On both a gross and net basis, the Fire Portfolio meets or exceeds the NFI-ODCE over the quarter, one, three, five, and ten-year time periods. The benchmark return contemplates a 100 bps premium over the ODCE net return over full market cycles. This benchmark is exceeded over the quarter, one, three, five and ten-year time periods. The various components of the Portfolio returns are depicted in the chart below.

Core/Core Plus

As of March 31, 2021, the market value of the Core/Core Plus Portfolio was \$504.8 million, or 63.8% on an invested basis. On a funded and committed basis, the Core/Core Plus Portfolio totaled \$573.0 million, or 52.0% of the total Portfolio. The Core / Core plus Portfolio generated a 3.4% total gross return for the Quarter comprised of 1.0% in income and 2.3% in appreciation. The total net return for the Quarter was 3.0%.

A significant contributor to the Quarterly return in this sector was Exeter Industrial Core Fund II, which generated a 8.1% total net return. A significant detractor from the Core / Core Plus Portfolio was Jamestown Premier Property Fund, which generated a (3.0%) total net return.

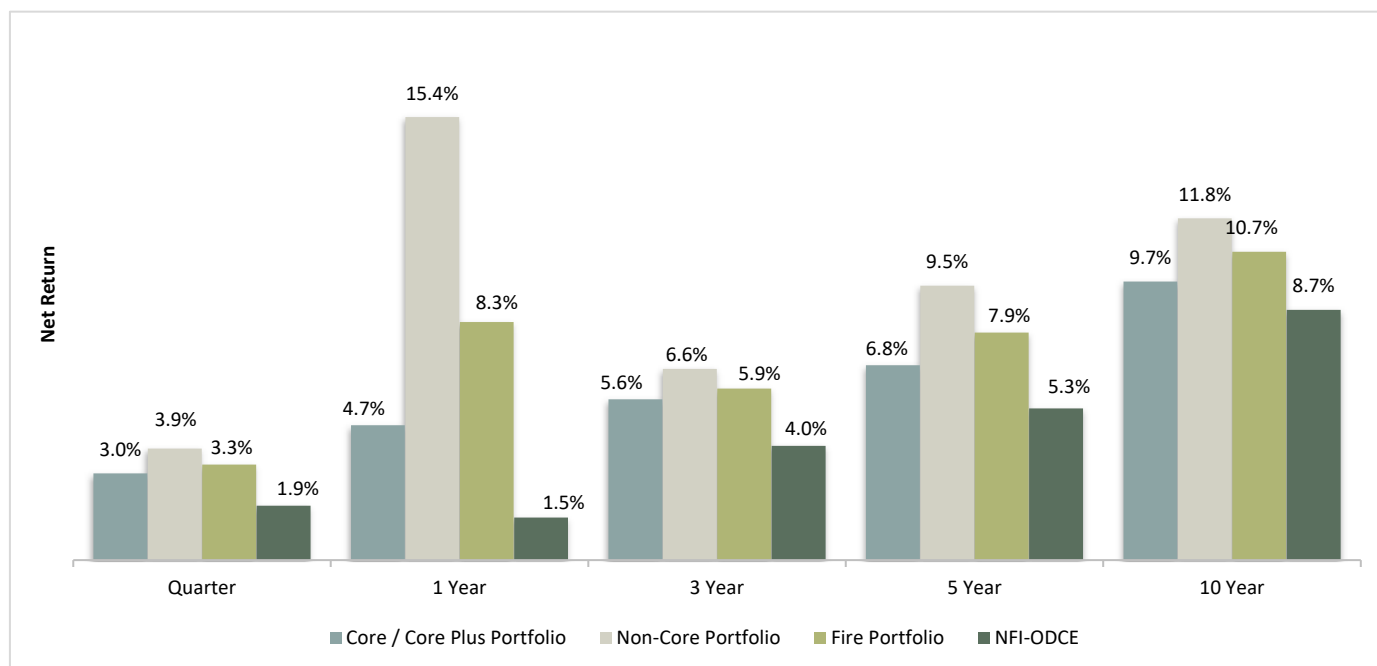
The Core / Core Plus Portfolio achieved a 5.6% net return over the three-year period ending in March 31, 2021. Within the Core / Core Plus Funds, Lion Industrial Trust was a significant contributor, generating a 15.4% total net return. NYC Asset Investor #2 was a significant detractor, generating a (14.5%) total net return over the period.

Non-Core

As of March 31, 2021, the market value of the Non-Core Portfolio was \$285.8 million, or 36.1% on an invested basis. On a funded and committed basis, the Non-Core Portfolio totaled \$528.5 million, or 46.3% of the total Portfolio. The Non-Core Portfolio generated a 5.3% total gross return for the Quarter comprised of 0.8% in income and 4.5% in appreciation. The total net return for the Quarter was 3.9%.

A significant contributor to the Quarterly return in this sector was H/2 Special Opportunities Fund IV which generated a 18.1% total net return. A significant detractor from the Non-Core Portfolio was Blackstone Real Estate Partners Europe VI, which generated a (4.4%) total net return.

The Non-Core Portfolio generated a three-year net return of 6.6%. Within the Non-Core Portfolio, PW Real Estate Fund III was a significant contributor, generated a 20.4% total net return. Thor Urban Property Fund II was a significant detractor, generating a (36.2%) total net return over the period.



The New York City Fire Department Pension Fund

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PERFORMANCE

Portfolio Performance

At the end of the First Quarter, the Portfolio had a cumulative market value of \$790.5 million. Total market value plus unfunded commitments was \$1.1 billion, or 87.5% of the real estate allocation. During the Quarter, the Portfolio achieved a total gross return of 4.1% which was comprised of 1.0% in income and 3.1% in appreciation. The Portfolio achieved a total net return of 3.3%. Since inception, the Portfolio has a net IRR of 7.6% and an equity multiple of 1.4x as of March 31, 2021. Note, attached as Exhibit B are performance metrics relating to each investment within the Portfolio.

Brief reviews of select Funds are found below. Note, that attached as Exhibit C are charts relating to fund contributions to returns during different relevant periods.

Lion Industrial Trust. Lion Industrial Trust generated a total net return of 5.3%. Over a trailing one-year period, the fund has generated a gross return of 16.5% and a net return of 14.4%. Performance during the Quarter was primarily driven by write ups across the portfolio due to increases in underlying property NOI. Additionally, the Fund recognized gains from multiple development projects completed during the Quarter.

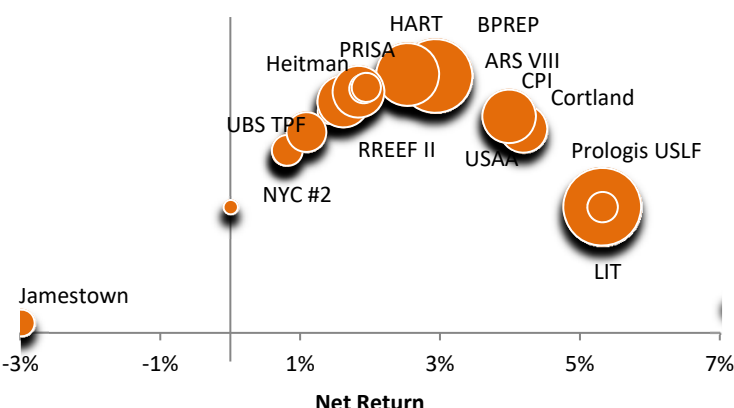
Carlyle Property Investors. Carlyle Property Investors generated a total gross return of 4.6% comprised of 0.9% in income and 3.7% in appreciation. The net return after fees was 4.0%. Performance was driven by strong operating results for investments in Single Family Rental and Life Science Lab sectors.

Blackstone Real Estate Partners VIII. During the Quarter, Blackstone VIII had a total gross return of 4.0% comprised of 1.2% in income and 2.9% in appreciation. The net return after fees was 3.0%. Performance was driven primarily by the U.S. logistics portfolios which continues to benefit from an acceleration of e-commerce trends and strong fundamentals.

Exeter Industrial Value Fund IV. During the Quarter, Exeter IV generated a total gross return of 12.6% comprised of 1.2% in income and 11.4% in appreciation. The net return after fees was 9.9%. Performance was driven by strengthening of the Fund's leasing, national industrial market fundamentals and global investor demand for core industrial properties.

Core/Core Plus	1-Year	3-Year	5-Year	S.I. IRR
Net Return	4.7%	5.6%	6.8%	6.4%

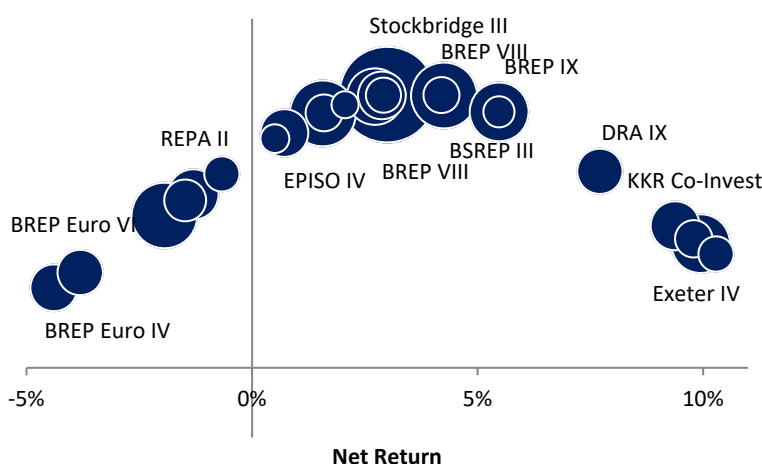
Distribution of Quarterly Returns



Note: Bubble size based on Average Invested Capital. Due to scaling, the net returns for Exeter II and Exeter III of 8.1% and 7.2%, respectively, are not shown on the chart.

Non-Core	1-Year	3-Year	5-Year	S.I. IRR
Net Return	15.4%	6.6%	9.5%	8.9%

Non-Core: Distribution of Quarterly Returns



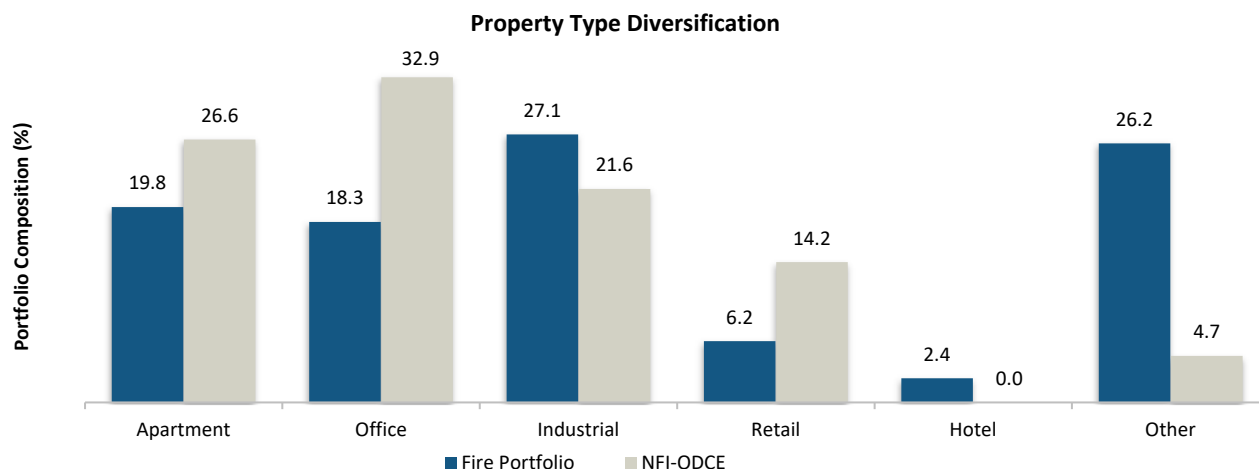
Note: Bubble size based on Average Invested Capital. Due to scaling, the net return for H/2 IV of 18.1% is not shown on the chart.

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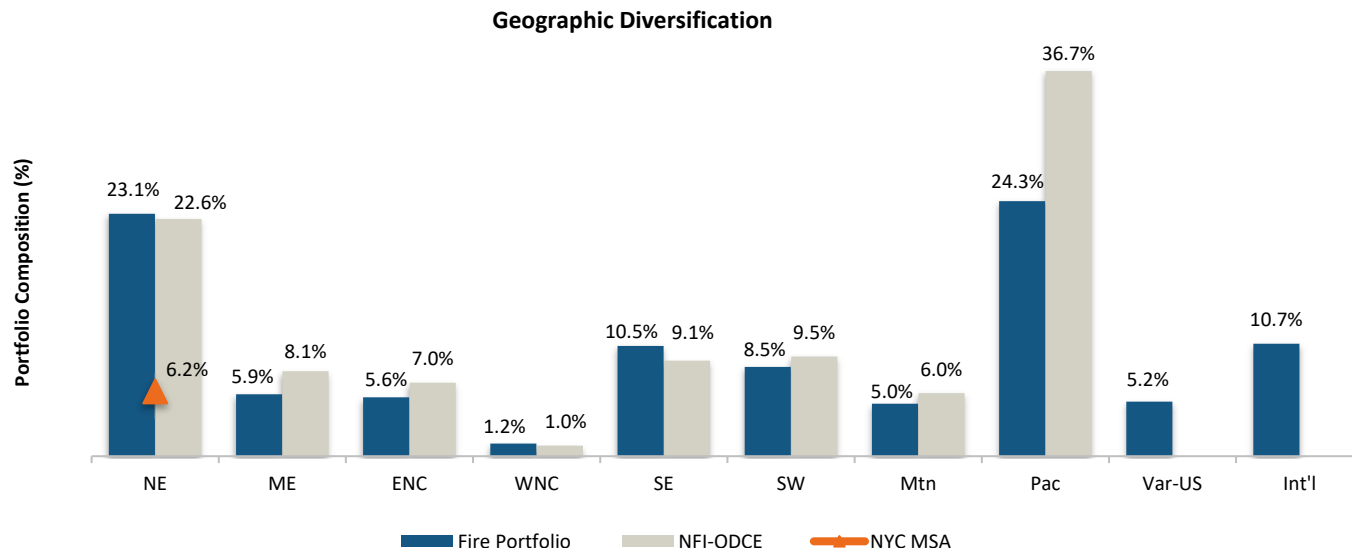
PROPERTY TYPE DIVERSIFICATION

The diversification of the current Portfolio by property type is shown below and compared to the diversification of the NFI-ODCE at the end of the Quarter. Relative to the ODCE, the Portfolio is underweight to multifamily, office, and retail. The Portfolio is overweight to industrial, hotel and other property types which includes debt-related investments and non-traditional property types such as for sale residential, self storage, land, data centers, senior living, healthcare, medical office and student housing.



GEOGRAPHIC DIVERSIFICATION

The diversification of the current funded Portfolio by geographic region is shown below and compared to the diversification of the NFI-ODCE at the end of the Quarter. The ODCE is a US-only index. The domestic portion of the Portfolio is well diversified relative to the ODCE. The 10.7% international exposure is appropriate for the risk and return profile of Fire and consistent with the long-term target. Exposure to the NYC MSA is also included, which stands at 6.2% as of March 31, 2021.



The New York City Fire Pension Fund

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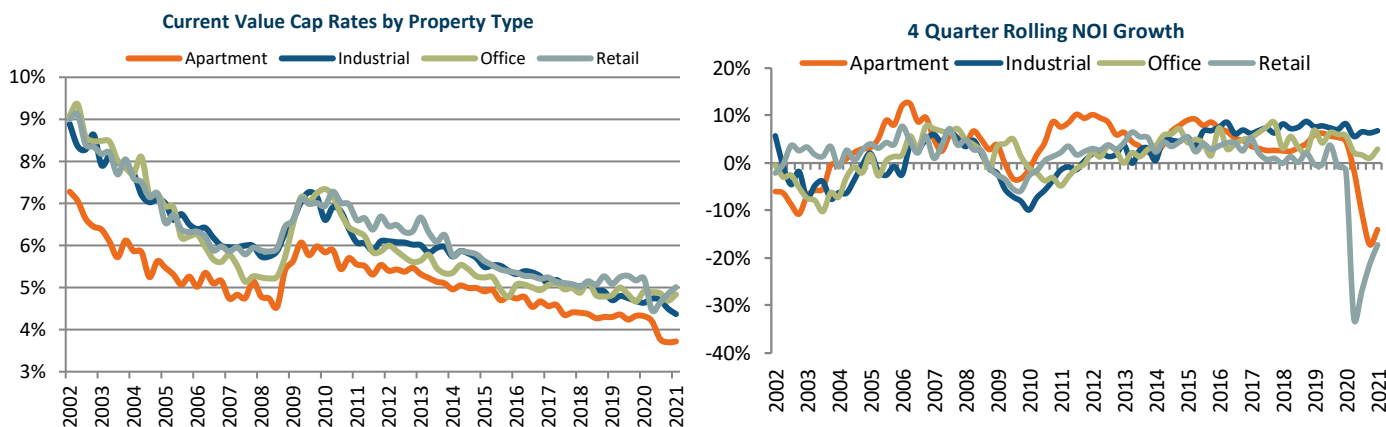
MARKET UPDATE

General

- As a result of the COVID-19 pandemic, national, state and local governments across the world implemented stay-at-home orders, which caused a near complete halt of the world economy in the 1st half 2020. Governments dramatically expanded expenditures in order to protect people and businesses from large-scale disruption. In 1Q21, equity markets continued to bounce back from the March 2020 rout and even exceeded prior highs, and the S&P 500 produced a gross total return of 6.2%. The MSCI US REIT index continued to rebound and produced a return of 8.8% and returned close to pre-COVID levels.
- The U.S. entered a recession in February 2020, but the economy has since rebounded with the accelerated development and rollout of vaccines. In the 1st quarter, GDP grew at an annualized rate of 6.4%. The unemployment rate peaked in April at 14.7% and has since declined to 6.1% at quarter end 1Q21. The Federal Reserve has acted aggressively via quantitative easing and rate cuts, thus far financial markets have stabilized. The world economy shrunk by -3.3% in 2020 but is forecasted to grow 6.0% in 2021.

Commercial Real Estate

- Through April of 2021, transaction volume was up by 60% YoY, after rebounding from a COVID-19 induced slowdown. Transaction volume has been the strongest in the apartment and industrial sectors.
- Transaction cap rates (5.9%) expanded +34 bps during the quarter. Current valuation cap rates declined for industrial (-13 bps). The office (+15 bps) and retail (+16 bps) property sectors experienced cap rate expansion. Apartment valuation cap rates were flat.
- NOI growth has substantially diverged between property sectors due to the impacts of COVID-19. Retail NOI has contracted substantially (-17%) YoY as rent collections declined and retailers were shutdown. Apartment NOI contracted (-14%), primarily driven by declines in CBD effective market rents.
- In the first quarter of 2021, \$34 bn of aggregate capital was raised by real estate funds. There continues to be substantial dry powder, ~\$362 billion, seeking exposure to private real estate.
- 10-year treasury bond yields rose 80 bps to 1.7% during the quarter as a result of an improving economic growth outlook and growing inflationary pressures.



Sources: Bureau of Economic Analysis, U.S. Census Bureau, Federal Reserve Board, NCREIF, Cushman and Wakefield, Real Capital Analytics, Bloomberg LP., Preqin, University of Michigan, Green Street

The New York City Fire Department Pension Fund

Executive Summary: First Quarter 2021 Performance Measurement Report

Real Estate

EXHIBIT A: COMPLIANCE MATRIX

Category	Requirement	Portfolio Status
Benchmark	NFI-ODCE (net) +100 bps over full market cycles	<i>Portfolio returns outperform the benchmark over the quarter, one, three, five, and ten-year time periods.</i>
Portfolio Composition	Core/Core Plus (3% of RE Allocation)	<i>The portfolio is funded (market value) and committed at 87.5% of real estate allocation with a portfolio composition of 52.0% core/core plus and 48.0% non-core. Based on market value, the core/core plus portfolio is funded at 63.8% and the non-core portfolio is funded at 36.2%.</i>
	Non Core (4% of RE Allocation)	
Real Estate Allocation	Target of 7.0%	<i>Funded (market value) and committed dollars place the portfolio at 6.1% of total plan assets.</i>
	Currently Funded at 4.4%	
Property Type Diversification	Up to 40% Multifamily Up to 35% Industrial Up to 45% Office Up to 35% Retail Up to 25% Hotel Up to 20% Other Up to 15% Debt*	<i>All property types are in compliance.</i>
Geographic Diversification	Diversified geographically Max 25% Ex-US	<i>All geographic type locations are in compliance based on market value.</i>
LTV	65%	<i>Portfolio is in compliance (44.5%).</i>
Manager Exposure	20% of real estate allocation	<i>Manager exposure is in compliance based on market value.</i>

*Debt has been established as a separate category with a 15% allocation in the 2021 Annual Plan. For reporting purposes, debt investments are included in the "Other" category in the performance report. Debt and "Other" property type exposure is compliant with the guidelines.

The New York City Fire Department Pension Fund

Executive Summary: First Quarter 2021 Performance Measurement Report

Real Estate

EXHIBIT B: FIRST QUARTER 2021 FOIL

Vintage Year	Fund Name	Style Sector	Geographic Play	First Draw Down	Capital Committed	Contributions	Distributions	Market Value	Equity Multiple	Net IRR
2019	Almanac Realty Securities VIII	Core / Core Plus Portfolio	Developed Americas	12/21/2018	10,500,000	2,564,874	-117,863	2,598,542	1.1	5.9
2019	Almanac Realty Securities VIII (Sidecar II)	Core / Core Plus Portfolio	Developed Americas	12/21/2018	7,000,000	1,748,526	-87,107	2,008,309	1.2	19.5
2019	Artemis Real Estate Partners Income and Growth Fund	Core / Core Plus Portfolio	Developed Americas	10/18/2019	10,000,000	3,077,844	-148,184	2,789,869	1.0	-4.1
2017	Brookfield Premier Real Estate Partners	Core / Core Plus Portfolio	Developed Americas	11/22/2016	19,000,000	22,679,790	-3,975,933	26,729,788	1.4	8.9
2017	Carlyle Property Investors	Core / Core Plus Portfolio	Developed Americas	7/3/2017	19,000,000	22,023,722	-3,290,764	25,230,544	1.3	8.8
2020	Cortland Partners Growth and Income Fund	Core / Core Plus Portfolio	Developed Americas	7/1/2020	25,000,000	25,439,553	-693,452	26,614,445	1.1	8.2
2016	Exeter Industrial Core Club Fund II	Core / Core Plus Portfolio	Developed Americas	5/20/2016	6,000,000	5,782,201	-1,284,915	7,455,307	1.5	15.6
2020	Exeter Industrial Core Fund III, LP	Core / Core Plus Portfolio	Developed Americas	2/19/2020	21,300,000	5,787,210	-226,061	6,023,140	1.1	13.1
2019	Harrison Street Core Property Fund, L.P.	Core / Core Plus Portfolio	Developed Americas	10/4/2019	6,700,000	7,114,042	-466,933	7,274,398	1.1	6.2
2019	Heitman Core Real Estate Debt Income Trust	Core / Core Plus Portfolio	Developed Americas	11/2/2018	8,000,000	9,119,558	-1,119,559	9,064,174	1.1	5.7
2007	Heitman HART	Core / Core Plus Portfolio	Developed Americas	3/29/2007	9,000,000	15,649,474	-6,649,474	20,465,963	1.7	6.8
2019	HSRE-Centre Street Core Co-Investment, L.P.	Core / Core Plus Portfolio	Developed Americas	5/28/2019	3,300,000	2,082,525	-128,359	2,246,734	1.1	8.3
2016	Jamestown Premier Property Fund	Core / Core Plus Portfolio	Developed Americas	2/4/2016	8,000,000	11,686,368	-4,364,788	8,324,230	1.1	3.0
2007	JP Morgan Special Situation Property Fund	Core / Core Plus Portfolio	Developed Americas	1/2/2007	5,000,000	5,870,702	-2,397,849	7,434,136	1.7	4.6
2007	JP Morgan Specialty Property Fund	Core / Core Plus Portfolio	Developed Americas	12/5/2006	22,000,000	24,459,391	-22,332,766	30,487,096	2.2	7.4
2020	Kayne Anderson Core Real Estate Fund	Core / Core Plus Portfolio	Developed Americas	4/1/2020	10,000,000	10,325,659	-447,939	10,294,743	1.0	4.7
2010	LaSalle Property Fund	Core / Core Plus Portfolio	Developed Americas	7/1/2010	48,000,000	48,000,000	-15,093,919	61,940,886	1.6	8.9
2017	Lion Industrial Trust - 2007	Core / Core Plus Portfolio	Developed Americas	1/1/2017	50,000,000	55,721,633	-4,804,126	70,880,147	1.4	14.9
2014	MetLife Core Property Fund	Core / Core Plus Portfolio	Developed Americas	7/1/2014	41,000,000	41,000,000	-6,272,235	44,838,241	1.2	7.3
2013	NYC Asset Investor #2 LLC	Core / Core Plus Portfolio	Developed Americas	7/9/2013	9,000,000	9,038,861	-3,770,524	6,327,713	1.1	2.4
2016	NYCRS Artemis Co-Investment	Core / Core Plus Portfolio	Developed Americas	2/24/2016	11,000,000	12,775,721	-4,967,662	11,348,370	1.3	11.9
2007	PRISA II	Core / Core Plus Portfolio	Developed Americas	6/30/2007	20,228,233	21,417,377	-8,775,129	30,675,917	1.8	5.5
2006	PRISA SA	Core / Core Plus Portfolio	Developed Americas	9/29/2006	7,000,000	7,530,220	-3,509,478	10,039,802	1.8	4.7
2006	Prologis Targeted U.S. Logistics Fund	Core / Core Plus Portfolio	Developed Americas	10/1/2006	35,000,000	6,745,383	-2,944,692	11,438,441	2.1	6.7
2006	RREEF America REIT II	Core / Core Plus Portfolio	Developed Americas	10/1/2006	7,000,000	9,178,399	-5,431,572	10,210,043	1.7	5.1
2006	UBS Trumbull Property Fund	Core / Core Plus Portfolio	Developed Americas	9/28/2006	27,000,000	41,213,811	-43,677,357	18,384,773	1.5	6.1
2016	USAA Eagle Real Estate Fund	Core / Core Plus Portfolio	Developed Americas	12/1/2015	30,000,000	30,000,000	-132,451	33,630,095	1.1	3.9
Core / Core Plus Portfolio					475,028,233	458,032,844	-147,111,091	504,755,846	1.4	6.4
2019	AERMONT Real Estate Fund IV	Non-Core Portfolio	Developed Europe	4/18/2019	10,271,627	2,425,925	0	1,851,769	0.8	-19.9
2008	AG Realty Fund VII	Non-Core Portfolio	Developed Americas	5/20/2008	15,000,000	14,100,000	-21,096,846	173,012	1.5	12.6
2008	American Value Partners Fund I	Non-Core Portfolio	Developed Americas	10/18/2007	5,000,000	3,785,294	-3,471,997	213,047	1.0	-0.5
2008	Ares European Real Estate Fund III, LP	Non-Core Portfolio	Developed Europe	5/6/2008	15,000,000	15,243,750	-16,746,250	130,124	1.1	2.6
2015	Avanath Affordable Housing Fund II	Non-Core Portfolio	Developed Americas	7/14/2015	2,220,000	2,158,370	-851,507	2,928,679	1.8	11.4
2018	Basis Investment Group Fund I	Non-Core Portfolio	Developed Americas	11/16/2017	4,100,000	2,955,981	-982,132	2,675,883	1.2	12.9
2004	Blackstone Real Estate Partners Europe III (USD Vehicle)	Non-Core Portfolio	Developed Europe	5/10/2004	5,000,000	6,406,782	-9,025,231	120,888	1.4	10.4
2010	Blackstone Real Estate Partners Europe IV (USD Vehicle)	Non-Core Portfolio	Developed Europe	10/24/2008	5,000,000	5,228,826	-7,115,819	575,144	1.5	10.5
2014	Blackstone Real Estate Partners Europe V (USD Vehicle)	Non-Core Portfolio	Unidentified	12/23/2013	26,000,000	25,349,397	-29,534,062	8,226,941	1.5	13.0
2020	Blackstone Real Estate Partners Europe VI (EURO Vehicle)	Non-Core Portfolio	Developed Europe	11/20/2019	19,997,747	6,884,837	-17,505	7,621,275	1.1	16.8
2019	Blackstone Real Estate Partners IX	Non-Core Portfolio	Global	9/23/2019	34,000,000	12,909,190	-1,847,884	13,785,357	1.2	22.6
2007	Blackstone Real Estate Partners VI	Non-Core Portfolio	Developed Americas	9/27/2007	10,000,000	11,170,327	-21,900,824	374,788	2.0	13.2
2012	Blackstone Real Estate Partners VII	Non-Core Portfolio	Global	3/31/2012	30,000,000	38,095,599	-48,974,006	11,875,773	1.6	15.2
2015	Blackstone Real Estate Partners VIII	Non-Core Portfolio	Global	8/18/2015	31,500,000	34,694,651	-24,249,000	24,916,371	1.4	14.1
2012	Brookfield Strategic Real Estate Partners	Non-Core Portfolio	Global	9/20/2012	15,000,000	17,262,297	-26,534,044	7,455,960	2.0	19.1
2019	Brookfield Strategic Real Estate Partners III	Non-Core Portfolio	Global	4/12/2019	30,000,000	17,029,966	-272,481	18,947,352	1.1	10.4
2007	Carlyle Realty Partners V	Non-Core Portfolio	Developed Americas	8/27/2007	5,000,000	6,347,279	-8,335,991	945,273	1.5	8.6
2011	Carlyle Realty Partners VI	Non-Core Portfolio	Developed Americas	9/14/2011	20,000,000	19,329,392	-31,374,837	1,500,243	1.7	24.5
2014	Carlyle Realty Partners VII	Non-Core Portfolio	Developed Americas	6/30/2014	15,000,000	13,648,346	-14,363,987	5,677,465	1.5	14.5
2007	Colony Investors VIII	Non-Core Portfolio	Global	9/18/2007	20,000,000	21,249,679	-9,077,467	377,071	0.4	-11.4
2012	Divco West Fund III	Non-Core Portfolio	Developed Americas	12/30/2011	30,000,000	29,429,127	-50,867,781	38,086	1.7	23.9
2014	Divco West Fund IV	Non-Core Portfolio	Developed Americas	1/15/2014	30,000,000	29,700,495	-45,575,160	4,264,285	1.7	25.0
2017	Divco West Fund V	Non-Core Portfolio	Developed Americas	12/21/2016	12,000,000	7,345,487	-1,419,488	7,269,288	1.2	6.1
2020	Divco West Fund VI	Non-Core Portfolio	Developed Americas	11/6/2020	17,000,000	1,021,996	0	909,556	0.9	-12.6
2020	DRA Growth & Income Fund X	Non-Core Portfolio	Developed Americas	3/25/2020	13,000,000	3,130,264	-567,648	2,919,793	1.1	18.5
2017	DRA Growth and Income Fund IX	Non-Core Portfolio	Developed Americas	3/9/2017	8,000,000	7,931,368	-2,822,659	7,591,154	1.3	13.8
2020	ElmTree Net Lease Fund IV	Non-Core Portfolio	Developed Americas	7/1/2020	11,000,000	2,245,182	0	2,109,665	0.9	-10.6
2016	European Property Investors Special Opportunities IV (EPISO IV)	Non-Core Portfolio	Developed Europe	12/18/2015	10,059,238	9,050,919	-2,361,330	9,735,917	1.3	10.7
2017	Exeter Industrial Value Fund IV	Non-Core Portfolio	Developed Americas	9/20/2017	10,000,000	9,443,137	-1,019,608	13,730,169	1.6	21.4
2021	Exeter Industrial Value Fund V	Non-Core Portfolio	Developed Americas	10/23/2020	10,000,000	2,500,000	0	2,825,972	1.1	15.4
2020	GreenOak Asia III (USD Vehicle)	Non-Core Portfolio	Global	4/17/2020	14,000,000	6,728,420	-4,583,369	2,331,565	1.0	7.4
2011	H/2 Special Opportunities Fund II	Non-Core Portfolio	Developed Americas	1/31/2011	10,000,000	10,000,001	-14,562,251	182,719	1.5	13.2
2015	H/2 Special Opportunities Fund III	Non-Core Portfolio	Developed Americas	12/29/2014	15,000,000	15,577,770	-13,231,169	5,445,486	1.2	6.8
2017	H/2 Special Opportunities Fund IV	Non-Core Portfolio	Developed Americas	11/15/2016	19,000,000	19,000,000	0	21,603,066	1.1	8.6
2017	KKR CMBS B-Piece SMA	Non-Core Portfolio	Developed Americas	9/27/2017	25,000,000	22,313,016	-5,638,526	20,531,274	1.2	6.9
2018	KKR Real Estate Partners Americas II	Non-Core Portfolio	Developed Americas	2/9/2018	20,070,000	19,508,801	-7,101,366	15,199,330	1.3	22.6
2021	KKR RESDOC	Non-Core Portfolio	Developed Americas	10/9/2020	21,000,000	19,518,582	-1,892,934	10,307,620	1.3	32.4
2014	Lone Star Real Estate Fund III	Non-Core Portfolio	Global	5/20/2014	25,000,000	23,435,387	-30,422,354	1,195,590	1.3	14.0
2017	Lone Star Real Estate Fund V	Non-Core Portfolio	Global	9/26/2017	23,100,000	6,218,670	-3,327,441	2,230,165	0.9	-7.4
2007	Metropolitan Workforce Housing Fund	Non-Core Portfolio	Developed Americas	7/13/2007	3,500,000	3,503,257	-4,186,143	64,596	1.2	3.8
2013	NYC Asset Investor #1 LLC	Non-Core Portfolio	Developed Americas	6/25/2013	5,000,000	5,543,383	-2,546,425	3,432,907	1.1	1.6
2013	NYC Asset Investor #3 LLC	Non-Core Portfolio	Developed Americas	9/20/2013	6,000,000	4,208,626	-759,574	4,493,537	1.2	5.4
2021	PGIM Real Estate Capital VII ("PRECap VII")	Non-Core Portfolio	Developed Europe	1/28/2021	20,000,000	1,519,566	0	1,498,066	1.0	-1.4
2017	Primerica Real Estate Capital VI (PRECap VI)	Non-Core Portfolio	Developed Europe	4/21/2017	10,040,161	9,918,660	-5,856,519	5,822,981	1.2	12.1
2016	PW Real Estate Fund III LP	Non-Core Portfolio	Developed Europe	10/7/2016	9,562,261	7,531,899	-3,201,177	11,738,514	2.0	28.3
2008	Silverpeak Legacy Partners III	Non-Core Portfolio	Global	5/28/2008	5,000,000	2,216,844	-467,199	258,200	0.3	-11.0
2008	Stockbridge Real Estate Fund III	Non-Core Portfolio	Developed Americas	9/9/2008	13,500,000	13,499,074	-8,414,877	8,295,472	1.2	2.7
2012	Taconic New York City Investment Fund LP	Non-Core Portfolio	Developed Americas	7/5/2012	20,000,000	8,363,637	-13,682,720	972,771	1.8	15.3
2004	The City Investment Fund I	Non-Core Portfolio	Developed Americas	3/16/2004	35,000,000	34,515,181	-34,904,154	54,320	1.0	0.3
2009	Thor Urban Property Fund II	Non-Core Portfolio	Developed Americas	10/30/2008	5,000,000	6,849,514	-6,847,656	657,193	1.1	2.9
2010	Walton Street Real Estate Fund VI	Non-Core Portfolio	Global	4/27/2009	5,000,000	4,432,393	-5,072,700	1,639,704	1.5	7.9
2010	Westbrook Real Estate Fund VIII	Non-Core Portfolio	Global	12/28/2009	5,000,000	5,976,064	-6,889,968	708,640	1.3	9.9
2016	Westbrook Real Estate Fund X	Non-Core Portfolio	Global	7/18/2016	8,000,000	7,691,269	-4,783,156	4,372,438	1.2	10.6
2021	Westbrook Real Estate Fund XI	Non-Core Portfolio	Global	1/28/2021	10,000,000	913,587	0	989,989	1.1	37.8
Non-Core Portfolio					801,921,034	627,057,464	-558,777,222	285,792,443	1.3	8.9
Small Emerging Manager					25,820,000	25,178,623	-14,459,441	17,230,574	1.3	6.4
New York City Fire Department Pension Fund					1,276,949,267	1,085,090,308	-705,888,313	790,548,289	1.4	7.6

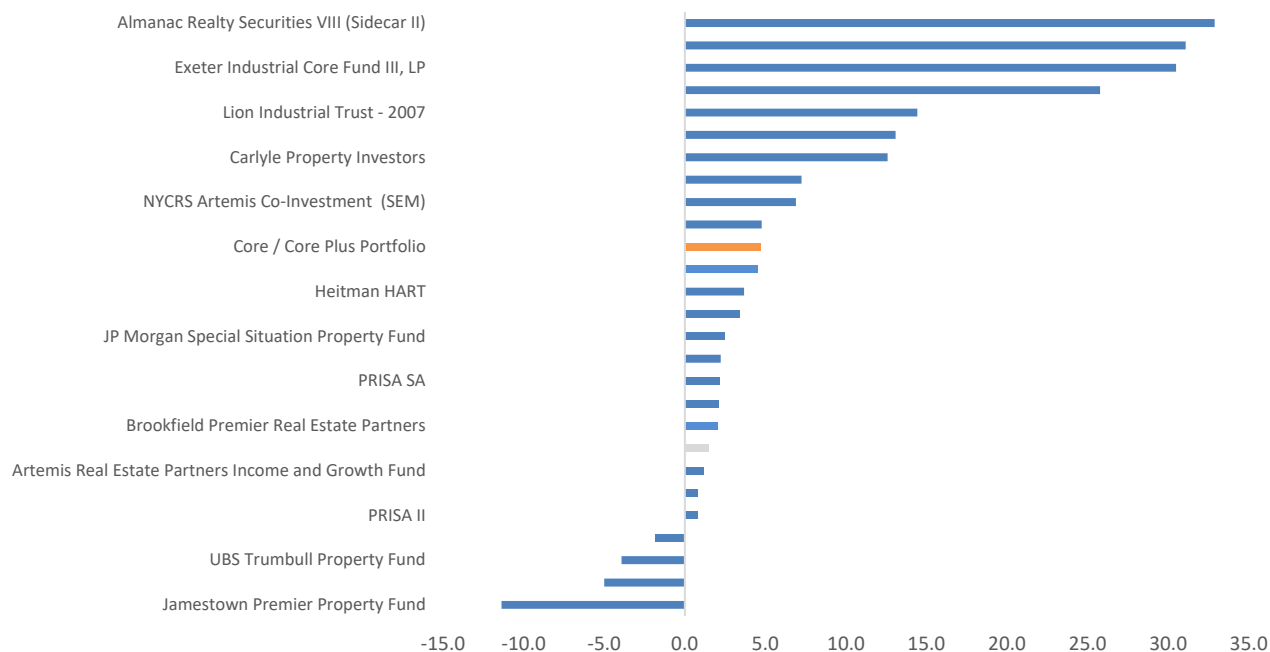
Source: PCG historical cash flow data. TTG cash flow data from Fund Managers, effective 2005. Note: The equity multiples and IRRs contained in this report are interim calculations based upon information provided by the investment managers of the New York City Retirement Systems, including cash flows and quarterly unaudited, or audited, valuations. The IRR calculated in early years of a fund life is not meaningful given the J-curve effect and can be significantly impacted by the timing of cash flows, investment strategy, investment pacing, and fund life. The calculations are not necessarily indicative of total fund performance, which can only be determined after the fund is liquidated and all capital contributed and earnings have been distributed to the investor. All data supplied is as of March 31, 2021. * vbcrlf & vbcrlf Note: The General Partner of the JPMorgan Urban Renaissance Fund terminated the Fund on February 23, 2010 and all capital contributed, including management fees, was returned to investors.

The New York City Fire Department Pension Fund

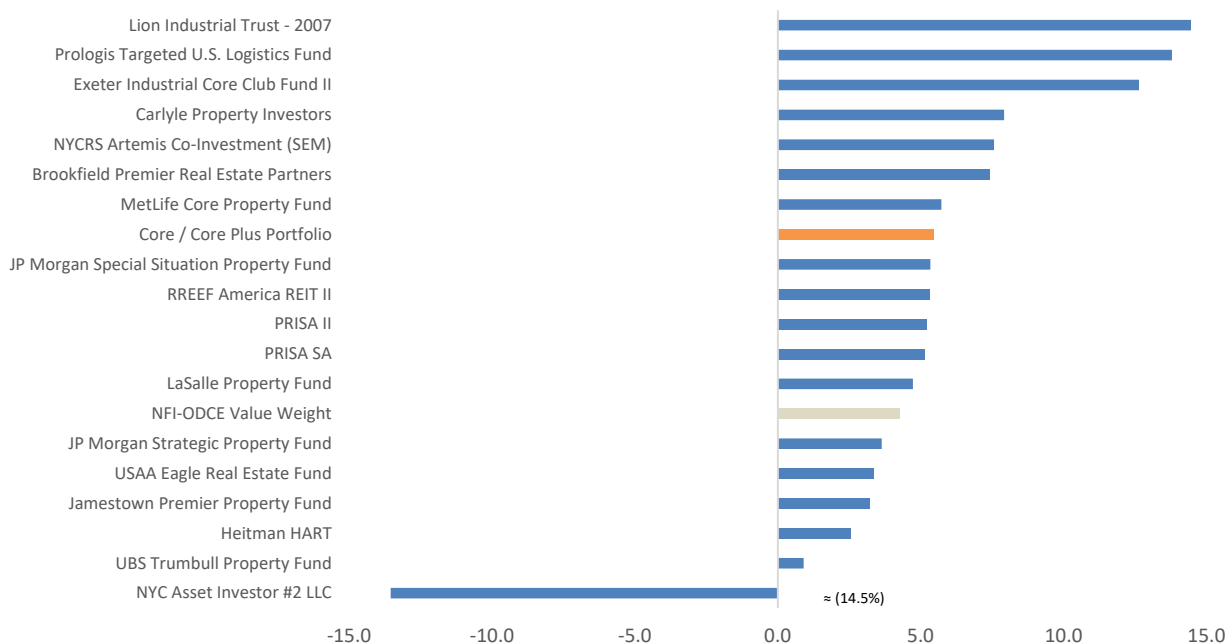
Executive Summary: First Quarter 2021 Performance Measurement Report
Real Estate

EXHIBIT C : CORE / CORE PLUS PERFORMANCE SUMMARY

Core / Core Plus One Year Net Time-Weighted Returns



Core / Core Plus Three Year Net Time-Weighted Returns



≈ (14.5%)

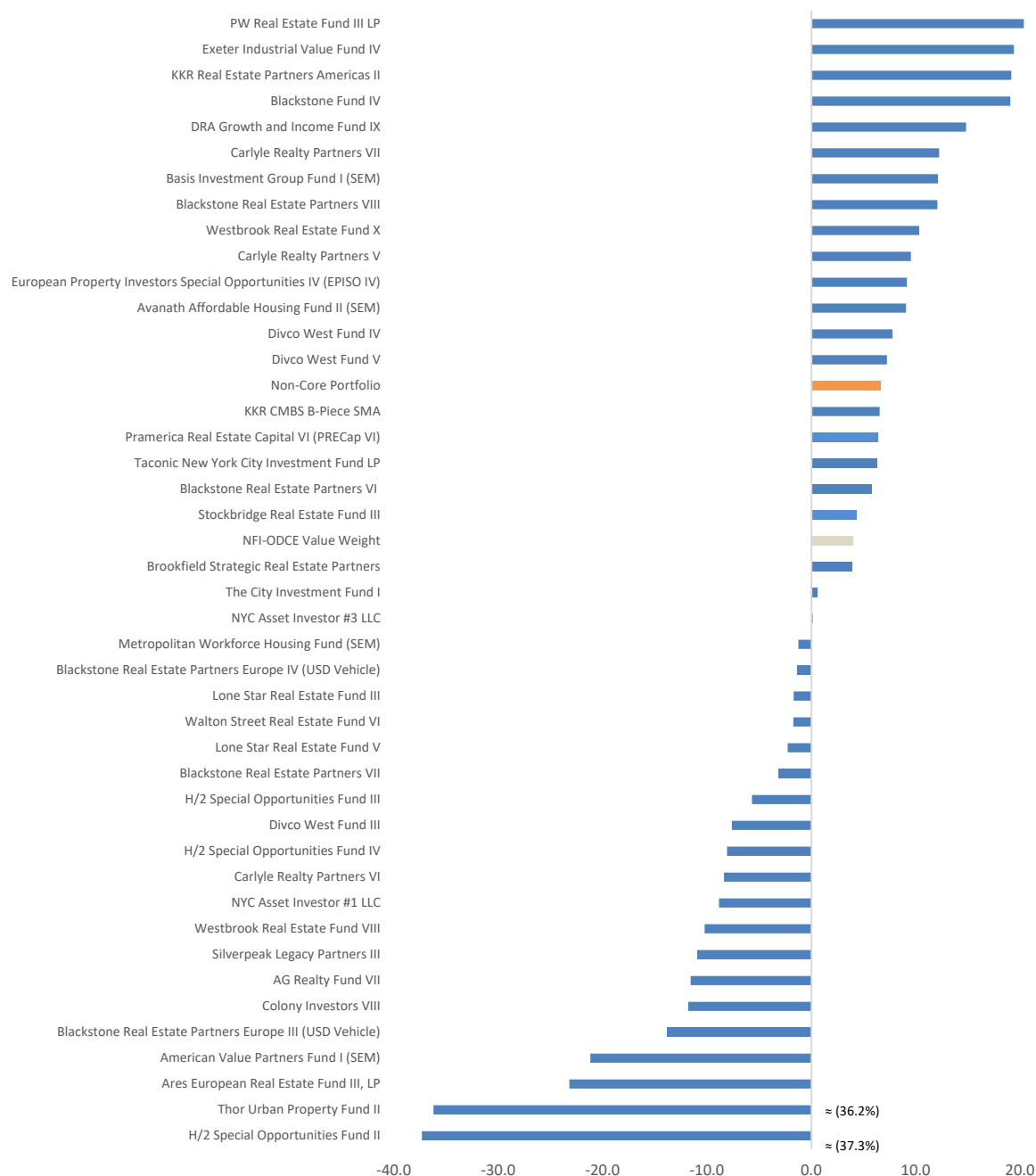
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Executive Summary: First Quarter 2021 Performance Measurement Report

Real Estate

EXHIBIT C : NON-CORE PERFORMANCE SUMMARY

Non-Core Three Year Net Time-Weighted Returns



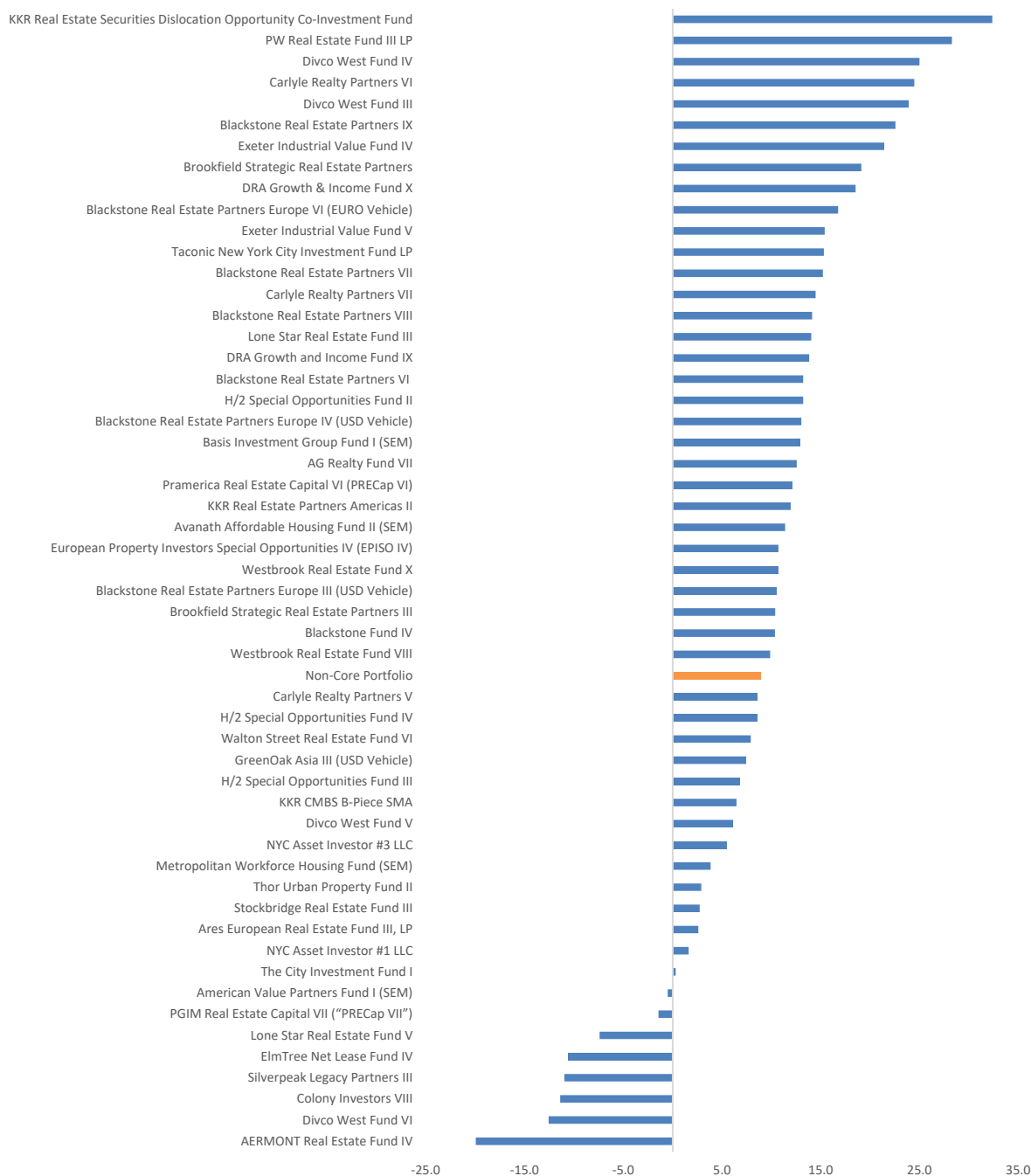
The New York City Fire Department Pension Fund

Executive Summary: First Quarter 2021 Performance Measurement Report

Real Estate

EXHIBIT C : NON-CORE PERFORMANCE SUMMARY

Non-Core Since Inception Net IRRs



Infrastructure Quarterly Report (Public):



Infrastructure Monitoring Report

For the period ended March 31, 2021

Report Prepared For:

New York City Fire Pension Fund, Subchapter 2



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All data is as of March 31, 2021 unless otherwise noted.

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I. Executive Summary

The New York City Fire Pension Fund, Subchapter 2 (“NYCFPF”) established the Infrastructure Program (the “Program”) in December of 2012 on behalf of its beneficiaries to participate in attractive long-term investment opportunities and to provide diversification to its overall pension investment portfolio.

The inclusion of infrastructure in the NYCFPF pension portfolio allows for global investments in facilities or assets that provide core essential services critical to the operation and development of economies. Typically infrastructure investments have high barriers to entry due to significant capital expenditure requirements, exclusive long term contracts or regulatory requirements. Infrastructure investments are comprised of long useful-life assets with high tangible value and relatively low value erosion over time.

The Program seeks to invest in opportunities in a variety of infrastructure sectors, including but not limited to, transportation, energy, power, utilities, water, wastewater, communications and social infrastructure.

StepStone Group LP (“StepStone”) was engaged by NYCFPF on October 20, 2014 to provide infrastructure advisory services for prospective investment opportunities and monitoring and reporting services for existing and new investments.

Since inception through March 31, 2021, the Program has committed US\$379.0 million to 26 partnership investments (the “Portfolio”). This quarterly monitoring report covers the performance of the Portfolio as of March 31, 2021 as well as significant activity that occurred during the first quarter of 2021.

Allocation Summary

NYCFPF has an Infrastructure allocation target of 3% of total pension assets. As of March 31, 2021, the market value of NYCFPF Infrastructure Program represented approximately 1.1% of total pension assets, a five-basis point decrease from the prior quarter.

US\$ in millions*	March 31, 2021	December 31, 2020	March 31, 2020	Quarterly Change	Yearly Change
Total Pension Assets*	\$17,548.0	\$15,987.0	\$15,263.0	\$1,561.0	\$2,285.0
Total Infrastructure Assets	\$192.8	\$184.0	\$157.2	\$8.8	\$35.6
% Allocation to Infrastructure (Target of 3%)	1.1%	1.2%	1.0%	-5 bps	+7 bps

*NYCFPF total Pension Assets are as of quarter-end (or, if not yet available, the most recent month-end prior to quarter-end) as reported by The New York City Comptroller's Office on www.comptroller.nyc.gov

Performance Summary

As of March 31, 2021, the Infrastructure Program has achieved a Total Value to Paid-In multiple of 1.3x invested capital and an IRR of 12.0%.

US\$ in millions*	March 31, 2021	December 31, 2020	March 31, 2020	Quarterly Change	Yearly Change
Number of Managers	11	10	10	1	1
Number of Investments	26	25	21	1	5
Committed Capital ¹	\$379.0	\$344.6	\$282.9	\$34.4	\$96.2
Contributed Capital	\$187.7	\$181.9	\$161.7	\$5.8	\$26.0
Distributed Capital	\$52.3	\$50.0	\$33.2	\$2.3	\$19.2
Market Value	\$192.8	\$184.0	\$157.2	\$8.8	\$35.6
Total Value	\$245.2	\$234.0	\$190.3	\$11.1	\$54.8
Total Gain/(Loss)	\$57.5	\$52.1	\$28.6	\$5.3	\$28.8
Unfunded Commitment	\$210.5	\$181.3	\$134.6	\$29.2	\$75.9
Exposure ²	\$403.3	\$365.3	\$291.8	\$38.0	\$111.5
DPI ³	0.3x	0.3x	0.2x	0.0x	0.1x
TVPI ⁴	1.3x	1.3x	1.2x	0.0x	0.1x
IRR ⁵	12.0%	12.0%	9.5%	0.0%	2.5%
TVPI Net of StepStone Fees ⁶	1.3x	1.3x	1.2x	0.0x	0.1x
IRR Net of StepStone Fees ⁶	12.0%	12.0%	9.4%	0.0%	2.6%

* Note that amounts may not total due to rounding. **Past performance is not necessarily indicative of future results and there can be no assurance that the investment will achieve comparable results or avoid substantial losses.**

¹ Committed Capital is presented net of any commitment releases or expirations and reflects foreign currency exchange rate fluctuations. Note that the Base/(US\$) committed capital for foreign currency-denominated investments as of respective quarter-end dates is calculated as follows: (total net amount funded in Base currency) + (unfunded commitment in Local currency * quarter-end exchange rate). StepStone utilizes S&P Capital IQ as the source for quarter-end exchange rates to calculate committed capital.

² Exposure represents the sum of Market Value and Unfunded Commitment.

³ DPI, or Distributed to Paid-In Multiple, is a performance metric that measures distributions received relative to capital invested. DPI is calculated as Distributed Capital divided by Contributed Capital.

⁴ TVPI, or Total Value to Paid-In Multiple, is a performance metric that measures total value created by the Portfolio relative to capital invested, without consideration for time. TVPI is calculated as Total Value, which is comprised of Market Value plus Distributed Capital, divided by Contributed Capital.

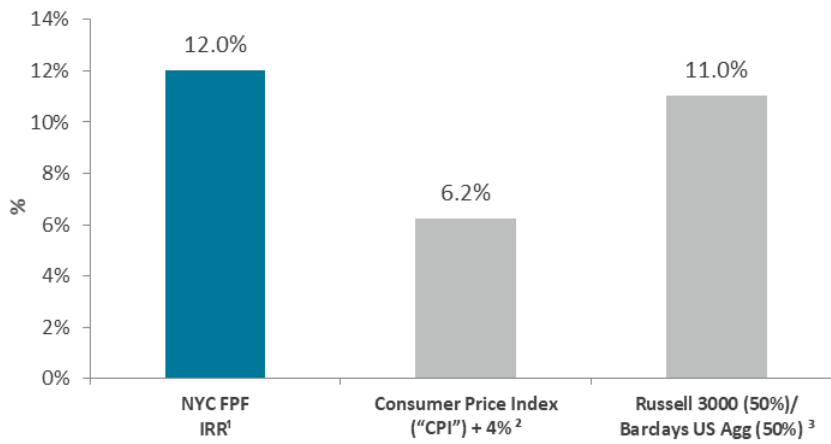
⁵ IRR, or Internal Rate of Return, is a performance metric that is calculated based on the Portfolio's daily cash flows and market value as of quarter-end. IRR is net of fund managers' fees, expenses and carried interest.

⁶ TVPI and IRR Net of StepStone fees represent TVPI and IRR net of fees paid by NYCFFP to StepStone through the quarter-end date. IRR and TVPI for certain vehicles may have been impacted by StepStone's or the underlying GPs' use of subscription-backed credit facilities by such vehicles. Reinvested/recycled amounts increase contributed capital.

Portfolio Performance vs. Benchmarks

The performance benchmark for the Infrastructure Portfolio is to meet or exceed the Consumer Price Index ("CPI") plus 4% net of fees over a rolling 5-year period. The Infrastructure Portfolio's performance is also measured against a dollar-weighted public benchmark, which produced the return that would have been earned if NYCFPF's infrastructure cash flows were invested in an index of 50% Russell 3000® and 50% Barclays U.S. Aggregate®. The Infrastructure Portfolio is expected to generate a total return, net of investment management fees, of at least 6.5%.

The following graph illustrates Portfolio IRR performance versus benchmarks as of March 31, 2021.



¹NYCFPF since inception Internal Rate of Return ("IRR") is calculated based on the Portfolio's daily cash flows and market value as of quarter-end. IRR is net of fund managers' fees, expenses and carried interest. **Past performance is not necessarily indicative of future results.**

²Consumer Price Index ("CPI") benchmark represents the compound annual growth rate of the Consumer Price Index for All Urban Consumers and All Items, as provided by the U.S. Department of Labor: Bureau of Labor Statistics, calculated over a five-year rolling period plus a 4.0% premium.

³ Benchmark is a dollar-weighted PME+ calculation of daily changes in 50% of the Russell 3000® Index and 50% of the Barclays U.S. Aggregate® Index. These index comparisons are being provided solely for informational purposes as an indication of returns that could be earned by investors by making similar investments in the indexes and should not be relied upon for any purpose. An investor cannot directly invest in an index. Moreover, indices do not reflect commissions or fees that may be charged to an investment product based on the index, which may materially affect the performance data presented.

Portfolio Diversification

The Program's objective is to build a Portfolio that is diversified by investment strategy, asset type, and geography. The target investment strategy ranges are as follows:

- Core Infrastructure Investments: 60% to 100%; and
- Non-Core Infrastructure Investments: 0% to 40%.

Actual percentages may differ substantially from these targets during the initial years of the Program. The following table illustrates the current diversification of the Portfolio by fund strategy, geography and industry focus.

	Market Value		Unfunded Commitment		Exposure	
	\$	% of Total	\$	% of Total	\$	% of Total
As of March 31, 2021. (US\$ In millions)						
By Strategy:						
Core	146.4	75.9%	155.7	74.0%	302.1	74.9%
Non-Core	46.4	24.1%	54.8	26.0%	101.2	25.1%
Total	192.8	100.0%	210.5	100.0%	403.3	100.0%
By Geographic Focus:						
Global	60.0	31.1%	72.2	34.3%	132.2	32.8%
North America	23.8	12.4%	49.7	23.6%	73.5	18.2%
OECD	109.0	56.5%	88.6	42.1%	197.6	49.0%
Total	192.8	100.0%	210.5	100.0%	403.3	100.0%
By Industry Focus:						
Communication	7.8	4.0%	-	0.0%	7.8	1.9%
Diversified	155.7	80.7%	178.9	85.0%	334.5	82.9%
Energy	27.1	14.1%	31.6	15.0%	58.8	14.6%
Transportation	2.2	1.1%	-	0.0%	2.2	0.5%
Total	192.8	100.0%	210.5	100.0%	403.3	100.0%

II. Infrastructure Market Overview

Market Update

North America

During Mar-2021, infrastructure deal activity across North America continued to experience a decline compared to prior quarters. A total of 64 infrastructure transactions were closed with an aggregate value of US\$11.7 billion. The energy sector had the greatest number of recorded transactions with 46 deals collectively valued at US\$4.2 billion, followed by the utilities sector with 7 deals collectively valued at US\$5.8 billion. The transportation and telecommunications sectors experienced a reduction in deal flow, which had experienced elevated levels of deal activity in prior quarters.

Within the energy sector, renewables accounted for the majority of deals at 36 of 46 deals. Activity in the sector continues to be dominated by solar and wind transactions. In Jan-2021, Carlyle's Global Infrastructure Opportunity Fund and Renewable and Sustainable Energy Fund invested US\$374 million investment into Amp Solar Group's solar energy development platform. Goldman Sachs Renewable Power LLC also closed its US\$410 million acquisition of the Slate Solar Plant project in California.

During the quarter, the midstream sector experienced a decline in transaction volumes compared to the prior quarter. In Feb-2021, UGI reached financial close on its acquisition of Mountaineer Gas Company for US\$540 million. Diamondback Energy also closed its US\$375 million acquisition of Guidon Operating LLC, which owns oil and gas assets in the Northern Midland Basin. ArcLight announced that they will acquire a 25% minority stake in Natural Gas Pipeline Company of America for US\$830 million from Kinder Morgan and Brookfield Infrastructure Partners, which owns and operates a 9,100-mile pipeline system and several LNG processing plants in the US.

During the quarter, the utilities sector recorded the largest total deal value of any infrastructure sector, driven by NRG Energy's US\$3.6 billion acquisition of Direct Energy in Jan-2021, which is a leading North American retail provider of electricity and natural gas. In Feb-2021, Brookfield announced the sale of its Enwave Energy's Canadian and US power utility companies to two consortiums of investors for an aggregate value of US\$4.1 billion, and Western Generation Partners closed its US\$837 million acquisition of a portfolio of power plant assets in the US and Trinidad & Tobago. In Mar-2021, the transmission subsidiary of NextEra Energy closed its acquisition of GridLiance for US\$660 million, which owns and operates over 700 miles of transmission lines and substations across six states.

The transportation sector, Lineage Logistics closed its US\$500 million acquisition of Cyro-Trans in Jan-2021, which is the owner of North America's largest provider of refrigerated and insulated railcars. In Feb-2021, a consortium of investors led by Vision Ridge Partners closed a US\$253 million investment into Highland Electric Transportation, which provides electric vehicle solutions to school districts and fleet managers in the US. In Feb-2021 the consortium of GIP, Blackstone and Bill Gate's Cascade Investments announced that they will commit US\$5.6 billion to Signature Aviation, which provides fuelling and ground handling services to private jet clients globally with the majority of its operations concentrated in the US. In Mar-2021, AmeriStarRail announced its initial proposal on its US\$5.0 billion privatization plan of Amtrak's North East corridor.

UK & Europe

During Mar-2021, the renewables sector experienced robust M&A activity. Greencoat completed its acquisition of the remaining 50% stake in Braes of Doune, a 72MW onshore wind farm from Federated Hermes for £48.1 million (~€55 million). Greencoat also bought the remaining 49.9% stake in the 67.2MW Kype Muir Extension wind farm for £51.4 million (~€59 million) from Banks Renewables. Chinese state-owned power company, China Three Gorges Corporation, completed its

acquisition of X-Elio's pipeline of solar assets, representing a total capacity of ~575MW, for an expected total consideration of ~€600 million. Publicly listed investment trust, Bluefield Solar Income Fund acquired the Bradenstoke solar project, a 70MW operational solar plant in Wiltshire, England, for £89 million (~€103 million). First Sentier's European Diversified Infrastructure Fund III completed the acquisition of SSE's 50% stakes in energy-from-waste assets Ferrybridge 1 and 2 for £995 million (~€1,150 million).

In the social infrastructure sector, private equity firm Partners Group announced the acquisition of Nordic modular education building provider Parmaco from a consortium led by European private equity firms Terra Firma and Metric Capital.

In the telecommunications sector, Telefonica Deutschland and Allianz reached financial close for their 5G roll out joint venture. Telefonica Deutschland have committed €500 million of equity financing, with Allianz expected to contribute ~€1 billion through various instruments including equity. The venture is further supported by a €450 million loan from the European Investment Bank and term loans exceeding €3 billion.

Australia

During Mar-2021, deal flow continued to recover from subdued activity throughout 2020 due to COVID-19 and volatility across oil and gas markets. While the pandemic saw certain sectors severely impacted, such as airports and midstream, other sectors such as telecommunications were at the forefront of private capital flows, as institutional investors sought to take advantage of heightened demand for digital infrastructure assets.

In the telecommunications sector, specialist fibre and network solutions provider Vocus agreed to a A\$5.50 per share takeover from Macquarie Infrastructure and Real Assets ("MIRA") and Aware Super. The transaction valued Vocus at A\$4.6 billion (US\$3.5 billion) including debt and represented a premium of 26% and 12x EV/EBITDA. In Feb-2021, Australian telecom carrier Telstra announced its intention to sell its mobile towers business, with indicative bids expected to be called Sep-2021 with a rumoured price of A\$5 billion or more including debt.

The renewables sector continued to attract investors during the quarter, building upon momentum throughout 2020. Notable deals included Power Australian Renewables ("PowAR") fund and Mercury NZ entering into a NZ\$3.0 billion (US\$2.1 billion) Scheme Implementation Agreement to buy Tilt Renewables. Under the terms of the scheme, PowAR will acquire all of the ASX- and NZX-listed Australian business, while Mercury (which already owns 19.9% of Tilt), will acquire the New Zealand business. The transaction represents Infratil's first attempt to execute on its strategy following its rejection of AustralianSuper's NZ\$5.4 billion (US\$3.8 billion) takeover offer in Dec-2020. Switzerland's Partners Group also launched the sale of its 53% stake in the 242 MW Ararat Wind Farm; however, subsequently cancelled the process in Mar-2021.

The waste services sector also received attention from private capital with CPE and MIRA offering A\$2.3 billion (US\$1.8 billion) to buy ASX-listed waste company Bingo Industries at A\$3.50 per share. Singapore's Keppel Infrastructure Trust has since entered the process. First Sentier is also considering investment in Integrated Waste Services, a family-run Adelaide waste business operated by Veolia that has been for sale for several years. While neither transaction has been executed to-date, the activity is a testament to the increased interest in the sector in recent years.

Finally, US-based fund Ares and AMP Limited sign a non-binding Heads of Agreement to pursue the formation of a joint venture for AMP Capital's private markets businesses comprised of infrastructure equity, infrastructure debt and real estate. Under the proposed transaction, Ares would acquire a 60% share in AMP Capital's private markets businesses for A\$1.4 billion (US\$1.1 billion). The joint venture would be valued at A\$2.3 billion. The proposal came after Ares walked away from a full takeover of AMP; however, the manager has since expressed interest in taking full control of the private market businesses.

III. Portfolio Review

Quarterly Highlights

- **New Investment Commitment** – During the first quarter of 2021, the Program closed on one new investment commitment totaling US\$35.0 million. This is shown on the table below.

US\$ in millions

Investment	Month and Year Closed	Vintage Year	Strategy	Geographic Focus	Industry Focus	Committed Capital
Stonepeak Infrastructure Fund IV, L.P.	February 2021	2020	Infrastructure	North America	Diversified	\$35.0
Total						\$35.0

- **Subsequent Investment Commitments** – Subsequent to quarter-end, the Program closed on two new investment commitments totaling US\$39.0 million. This is shown on the table below.

US\$ in millions

Investment	Month and Year Closed	Vintage Year	Strategy	Geographic Focus	Industry Focus	Committed Capital
Stonepeak Tiger (Co-Invest) Holdings (I-B) LP	April 2021	2021	Co-Investment	North America	Communication	\$4.0
KKR Global Infrastructure Investors IV (USD) SCSp	May 2021	2021	Infrastructure	North America	Diversified	35.0
Total						\$39.0

- **Cash Outflow Decreased** – During the first quarter of 2021, the Program made US\$5.8 million of contributions and received US\$2.3 million of distributions, for a net cash outflow of US\$3.5 million. This compared to a net cash outflow of US\$3.8 million during the prior quarter.
- **Valuation Increased** – During the first quarter of 2021, net of cash flow activity, the valuation of the Portfolio increased by approximately US\$5.3 million, or 2.8%, from the prior quarter. The valuation increase primarily reflects the increase in value of underlying investments in KKR Global Infrastructure Investors II L.P.
- **New Underlying Fund Investments** – During the first quarter of 2021, 11 investment positions were added to the Portfolio.

US\$ in millions

Company	Fund(s)	Investment Date	Stage	Industry	Country	Exposed Invested Capital	Exposed Market Value	TVM
Nevel	ARDIAN Infrastructure Fund V B S.C.S., SICAV-RAIF	Jan-21	Private	Utilities	Finland	4.8	4.8	1.0x
Axiom Chariot (Denfield Power)	Axiom Infrastructure Canada II (Intl) Limited Partnership	Feb-21	Private	Renewables	Canada	1.8	1.8	1.0x
Calisen plc.	Global Energy & Power Infrastructure Fund III, L.P.	Mar-21	Private	Utilities	United Kingdom	1.6	1.6	1.0x
Torghatten	EQT Infrastructure V (No.2) USD SCSp	Feb-21	Private	Transportation	Norway	0.8	0.8	1.0x
Intoll Toronto Roads Ltd	Axiom Infrastructure Canada II (Intl) Limited Partnership	Feb-21	Private	Transportation	Canada	0.7	0.7	1.0x
Molslinjen	EQT Infrastructure V (No.2) USD SCSp	Feb-21	Private	Transportation	Denmark	0.6	0.6	1.0x
Shepherds Flat	Brookfield Infrastructure Fund IV, L.P.	Mar-21	Private	Renewables	United States	0.6	0.6	1.0x
Constellation Solar	Brookfield Infrastructure Fund IV, L.P.	Mar-21	Private	Renewables	United States	0.3	0.3	1.0x
Polenergia	Brookfield Infrastructure Fund IV, L.P.	Feb-21	Private	Renewables	Poland	0.2	0.2	1.0x
Thermondo GmbH	Brookfield Infrastructure Fund IV, L.P.	Feb-21	Private	Utilities	Germany	0.1	0.1	1.0x
Fiberklaar	EQT Infrastructure V (No.2) USD SCSp	Feb-21	Private	Telecom	Belgium	0.0	0.0	1.0x

- **Company Exits** – During the first quarter of 2021, four investment positions exited the Portfolio.

US\$ in millions

Company	Fund(s)	Investment Date	Exit Date	Stage	Industry	Country	Invested Capital	Total Value	TVM
Acciona Energia Internacional, S.A.	KKR Global Infrastructure Investors II L.P.	Dec-14	Feb-21	Private	Renewables	Spain	0.2	0.2	1.3x
Horizon Justice Sorel Tracy L.P.	Axiom Infrastructure Canada II (Intl) Limited	Jul-13	Feb-21	Private	Other	Canada	0.1	0.4	3.3x
NextEra Energy Partners	KKR Global Infrastructure Investors II L.P.	Nov-16	Feb-21	Public	Renewables	United States	0.4	0.7	1.7x
OPDENERGY, S.A.U.	NYCRS EIG Energy Partners, L.P.	Dec-18	Feb-21	Private	Renewables	Spain	0.6	0.7	1.1x

Performance by Vintage Year

The following table illustrates the Portfolio's since-inception investment performance by vintage year as of March 31, 2021. Note that the performance of funds that are less than two years old is not meaningful.

As of March 31, 2021 (US\$ in millions)

Vintage Year	Committed Capital	Contributed Capital	Distributed Capital	Market Value	Total Value	Total Gain/(Loss)	Unfunded Commitment	Exposure	DPI	TVPI	IRR
2013	\$15.0	\$12.7	\$5.7	\$17.2	\$22.9	\$10.2	\$3.2	\$20.3	0.4x	1.8x	13.0%
2014	32.0	36.8	25.2	32.6	57.8	21.0	0.9	33.6	0.7x	1.6x	14.8%
2016	68.9	50.4	11.1	51.9	63.1	12.6	24.4	76.4	0.2x	1.3x	9.8%
2017	41.8	33.3	6.1	37.6	43.7	10.4	12.0	49.6	0.2x	1.3x	13.4%
2018	64.0	25.1	1.6	24.5	26.1	0.9	40.7	65.2	0.1x	1.0x	3.0%
2019	56.4	21.3	2.5	21.3	23.8	2.5	36.2	57.5	0.1x	1.1x	11.2%
2020	62.1	8.0	0.1	8.0	8.1	0.1	54.2	62.2	NM	NM	NM
2021	38.8	-	-	(0.2)	(0.2)	(0.2)	38.8	38.6	NM	NM	NM
Total	\$379.0	\$187.7	\$52.3	\$192.8	\$245.2	\$57.5	\$210.5	\$403.3	0.3x	1.3x	12.0%

Performance by Strategy and Industry Focus

The following table illustrates the Portfolio's since-inception investment performance by strategy and industry focus as of March 31, 2021.

As of March 31, 2021 (US\$ in millions)

Strategy/Industry	Committed Capital	Contributed Capital	Distributed Capital	Market Value	Total Value	Total Gain/(Loss)	Unfunded Commitment	Exposure	DPI	TVPI	IRR
Core	\$287.7	\$146.6	\$47.1	\$146.4	\$193.5	\$46.8	\$155.7	\$302.1	0.3x	1.3x	11.6%
Diversified	239.4	121.6	35.9	126.9	162.8	41.2	129.5	256.5	0.3x	1.3x	11.2%
Energy	46.3	23.0	11.1	17.3	28.3	5.3	26.2	43.5	0.5x	1.2x	16.1%
Transportation	2.0	2.0	0.1	2.2	2.3	0.3	-	2.2	0.1x	1.2x	12.5%
Non-Core	\$91.3	\$41.1	\$5.3	\$46.4	\$51.7	\$10.6	\$54.8	\$101.2	0.1x	1.2x	14.4%
Communication	7.2	7.2	0.1	7.8	7.9	0.7	-	7.8	0.0x	1.1x	13.3%
Diversified	71.2	24.0	2.2	28.8	31.0	7.0	49.3	78.1	0.1x	1.2x	15.7%
Energy	12.9	9.9	2.9	9.9	12.8	2.9	5.4	15.3	0.3x	1.3x	12.3%
Total	\$379.0	\$187.7	\$52.3	\$192.8	\$245.2	\$57.5	\$210.5	\$403.3	0.3x	1.3x	12.0%

Performance by Geographic Focus

The following table and charts illustrate the Portfolio's since-inception investment performance by geographic focus as of March 31, 2021.

As of March 31, 2021 (US\$ in millions)

Geographic Focus	Committed Capital	Contributed Capital	Distributed Capital	Market Value	Total Value	Total Gain/(Loss)	Unfunded Commitment	Exposure	DPI	TVPI	IRR
Global	\$117.4	\$51.4	\$13.8	\$60.0	\$73.8	\$22.4	\$72.2	\$132.2	0.3x	1.4x	13.1%
North America	71.4	23.6	4.9	23.8	28.7	5.2	49.7	73.5	0.2x	1.2x	10.1%
OECD	190.2	112.8	33.7	109.0	142.7	29.9	88.6	197.6	0.3x	1.3x	11.6%
Total	\$379.0	\$187.7	\$52.3	\$192.8	\$245.2	\$57.5	\$210.5	\$403.3	0.3x	1.3x	12.0%

*Past performance is not necessarily indicative of future results and there can be no assurance that the fund will achieve comparable results or avoid substantial losses.

Portfolio Diversification

By Strategy, Geography and Industry Focus

The Program's objective is to build a Portfolio that is diversified by investment strategy, asset type, and geography. The target investment strategy ranges are as follows:

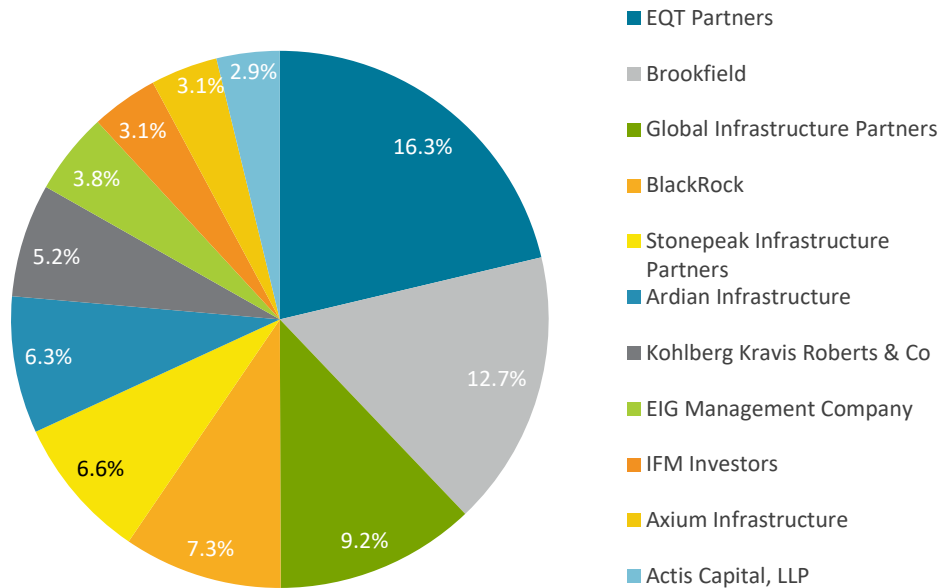
- Core Infrastructure Investments: 60% to 100%; and
- Non-Core Infrastructure Investments: 0% to 40%.

Actual percentages may differ substantially from these targets during the initial years of the Program. The following table illustrates the current diversification of the Portfolio by fund strategy, geography and industry focus.

	Market Value		Unfunded Commitment		Exposure	
	\$	% of Total	\$	% of Total	\$	% of Total
<i>As of March 31, 2021. (US\$ In millions)</i>						
By Strategy:						
Core	146.4	75.9%	155.7	74.0%	302.1	74.9%
Non-Core	46.4	24.1%	54.8	26.0%	101.2	25.1%
Total	192.8	100.0%	210.5	100.0%	403.3	100.0%
By Geographic Focus:						
Global	60.0	31.1%	72.2	34.3%	132.2	32.8%
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Communication	7.8	4.0%	-	0.0%	7.8	1.9%
Diversified	155.7	80.7%	178.9	85.0%	334.5	82.9%
Energy	27.1	14.1%	31.6	15.0%	58.8	14.6%
Transportation	2.2	1.1%	-	0.0%	2.2	0.5%
Total	192.8	100.0%	210.5	100.0%	403.3	100.0%

By Investment Manager

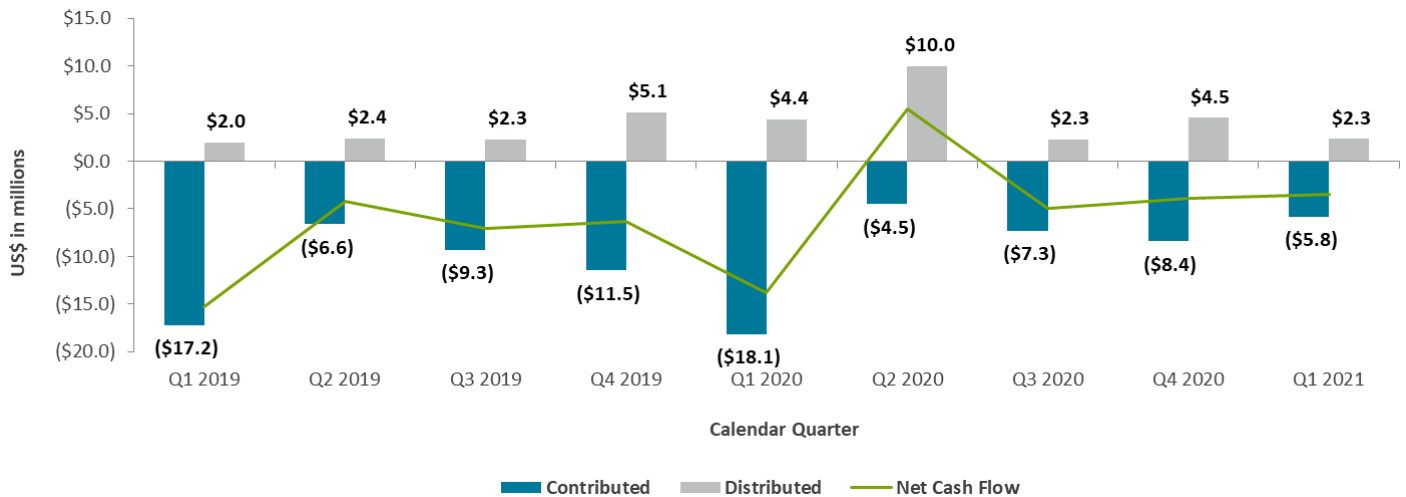
As of March 31, 2021, the Program had made 26 investment commitments to 11 managers. NYCFFP seeks to limit its exposure to any single manager to no more than 20% of the total Infrastructure Program when fully invested. As the Program matures and closes on additional commitments, the single manager exposure is expected to decline significantly. Below is the Portfolio's current exposure by manager.



Portfolio Cash Flow Analysis

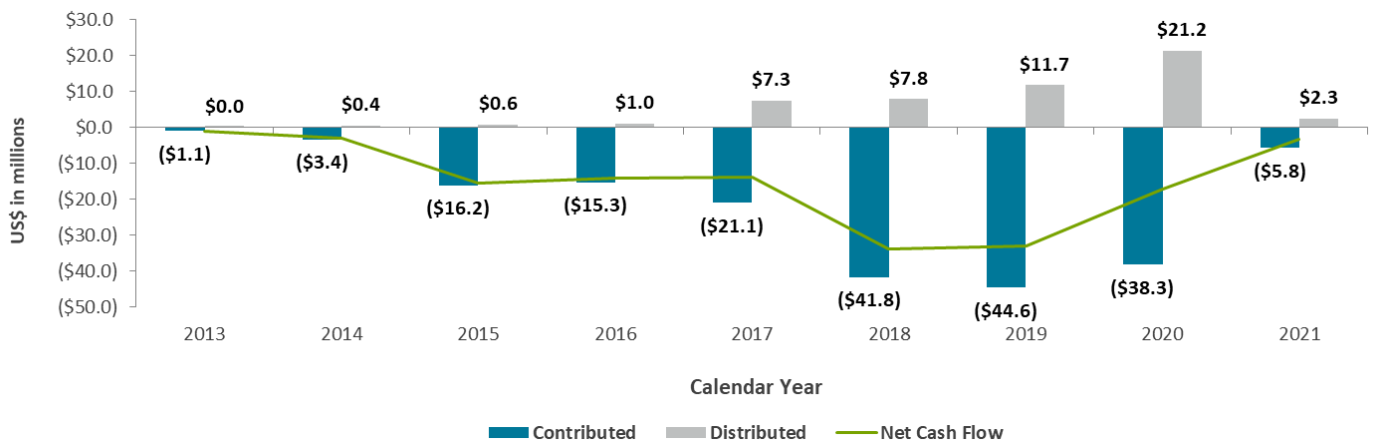
Quarterly Cash Flow Activity

During the first quarter of 2021, the Program made US\$5.8 million of contributions and received US\$2.3 million of distributions, for a net cash outflow of US\$3.5 million. As of March 31, 2021, 23 fund investments in the Portfolio had cash flow activity. As the Program's commitment and investment activity increases, net cash outflow is expected to increase. The graph below illustrates cash flow activity since inception by calendar quarter.



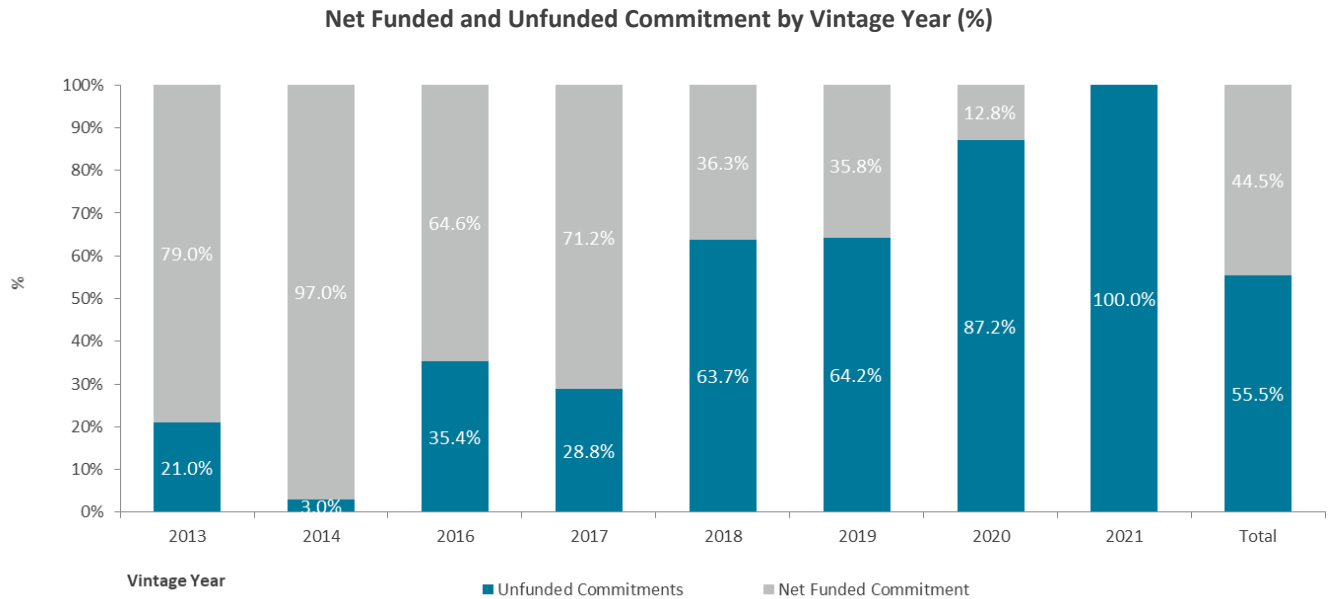
Annual Cash Flow Activity

During the first quarter of 2021, the Program made US\$5.8 million of contributions and received US\$2.3 million of distributions, for a net cash outflow of US\$3.5 million. The graph below illustrates cash flow activity since inception by calendar year.

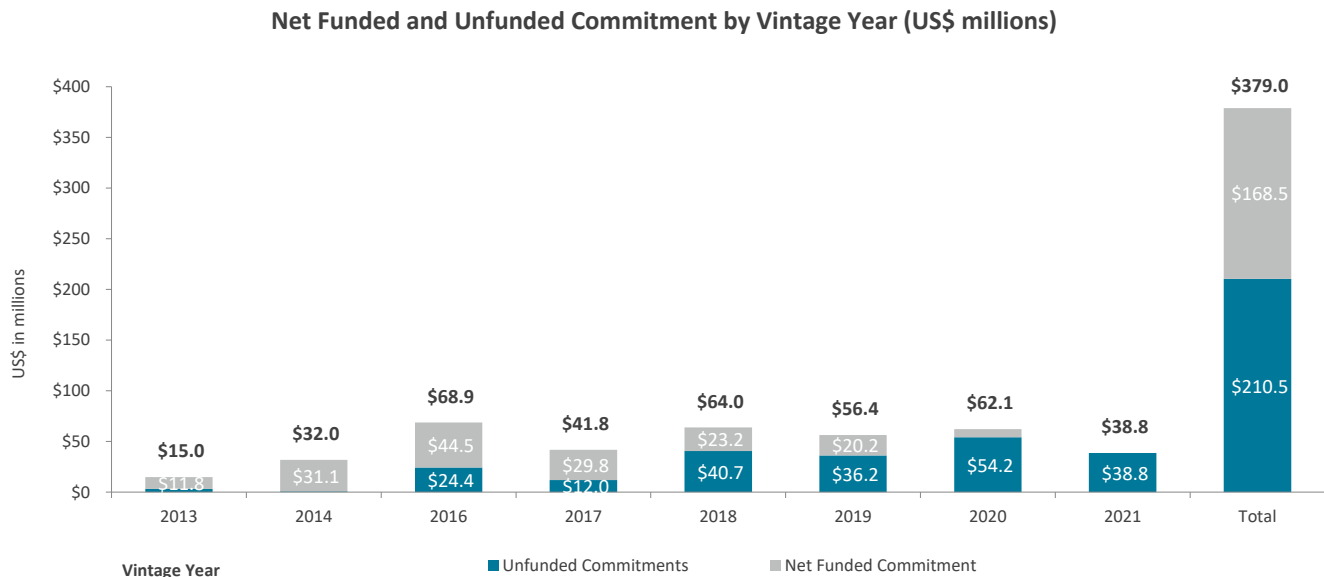


Net Funded and Unfunded Commitments by Vintage Year

The following chart illustrates the Portfolio's net funded commitments (defined as total contributions inside commitment less any returns of excess capital and callable distributions) as a percentage of total capital commitments, by fund vintage year, as of March 31, 2021. Overall, the Portfolio was 55.5% unfunded as of quarter-end.



The following chart illustrates the Portfolio's net funded commitments relative to total capital commitments, by fund vintage year, as of March 31, 2021. Overall, the Portfolio had US\$210.5 million of unfunded commitments as of quarter-end.

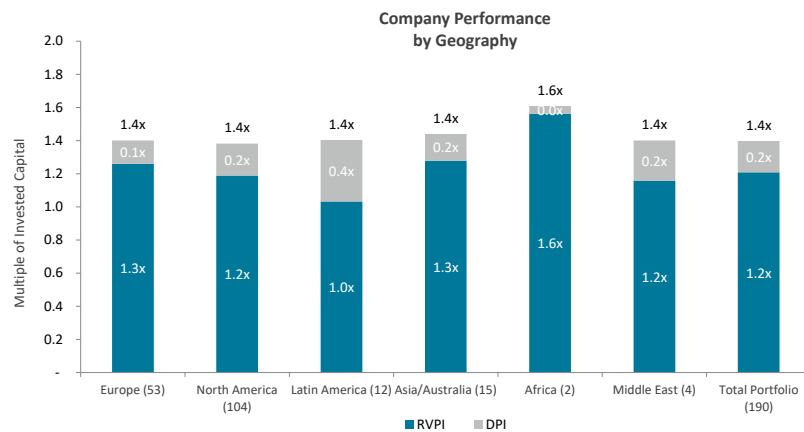
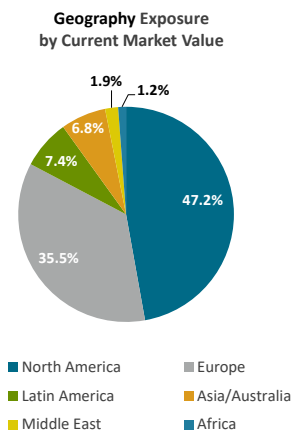


Portfolio Company-Level Analysis

As of quarter-end, the Portfolio had exposure to 190 unique unrealized portfolio companies/investment positions. As the Portfolio matures, the number of unique portfolio companies/investment positions is expected to increase significantly. On the individual fund level, all current investments are within the single investment limitation of 15% of total fund size. The Program's individual portfolio investment exposure is relatively concentrated as a result of the relative immaturity of the Program.

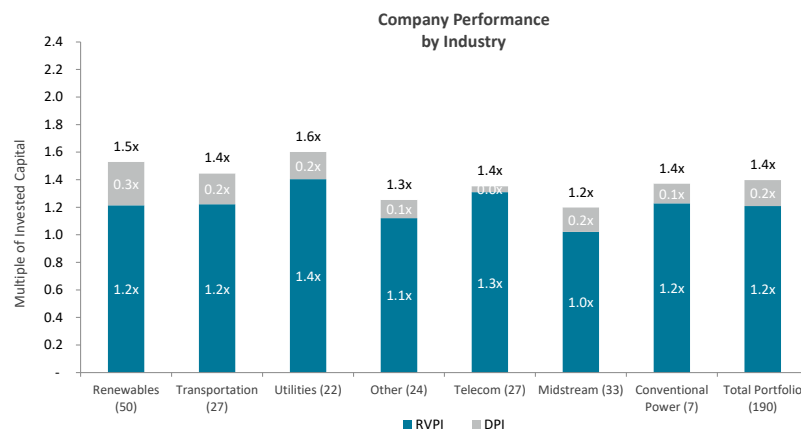
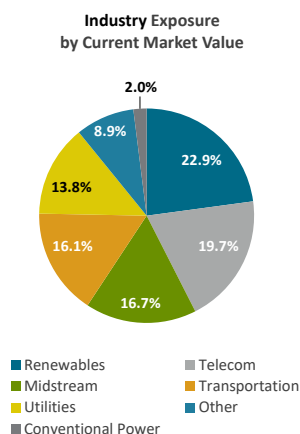
Geographic Exposure and Performance

The following charts illustrate the Portfolio's current exposure and performance by geographic region at the portfolio company level.



Industry Exposure and Performance

The following charts illustrate the Portfolio's current exposure and performance by industry at the portfolio company level.

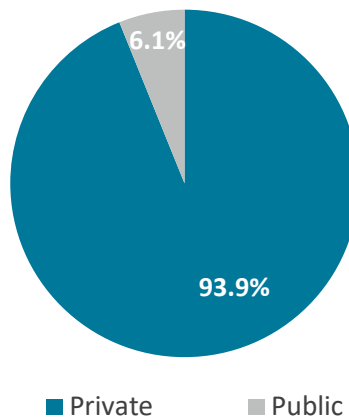


*Multiples may not add to total multiple due to rounding.

Public Market Exposure

As of quarter-end, publicly traded investments comprised 6.1% of the Portfolio’s exposed market value. The following chart illustrates the current public market exposure at the portfolio company level.

Public Market Exposure Current Market Value



IV. Risk Management Matrix

Category	Requirement	Status	Status Notes
Allocation	NYCFFP has an Infrastructure allocation target of 3% of total pension assets.	✓	The market value of NYCFFP Infrastructure Program represents approximately 1.1% of total pension assets.
Performance vs. Benchmarks	<p>The performance benchmark for the Infrastructure Portfolio is to meet or exceed: (i) The Consumer Price Index ("CPI") plus 4% net of fees over a rolling 5-year period and (ii) A dollar-weighted PME+ ("PME") calculation of daily changes in 50% of the Russell 3000® Index and 50% of the Barclays U.S. Aggregate® Index.</p> <p>The Infrastructure Portfolio is expected to generate a total return, net of investment management fees, of at least 6.5%.</p>	✓	As of March 31, 2021, the Portfolio outperformed the CPI and PME benchmark by 5.8% and 1.0%, respectively.
Strategy Diversification	<p>Core Infrastructure Investments: 60-100% Non-Core Infrastructure Investments: 0-40%</p> <p>Actual percentages may differ substantially from these targets during the initial years of the Program.</p>	✓	The Program is in compliance with the Core/Non-Core allocation ranges. Currently the Program has 74.9% exposure to Core investments and 25.1% exposure to Non-Core investments.
Asset Type & Location Diversification	The Program will seek diversification by asset type, revenue drivers, and geography. The portfolio may include a variety of assets including but not limited to electricity transmission, pipelines, airports, toll roads, communication towers and electric generators, windmills etc. to vary the sources of revenue to the portfolio.	✓	The asset types and geographic location of current Portfolio investments are in compliance with the Program's Investment Policy Statement and Permissible Markets.
Leverage	The average leverage of all investments in the Program is to be no higher than 65%.	✓	The Program is in compliance with the average leverage limitation. The current leverage level is 40.6% ¹ .
Single Investment Size & Manager Diversification	<p>The maximum commitment to a single investment is limited to no more than 15% of the aggregate committed capital of each fund.</p> <p>The maximum commitment to a single manager is limited to 20% of the total Infrastructure Program allocation when fully invested.</p>	✓	<p>On the individual fund level, all current investments are in compliance with the single investment limitation of 15% of total fund size.</p> <p>The Program is in compliance with the single manager limitation of 20% of the total Infrastructure Program.</p>

¹The Program's leverage level is calculated by using a weighted average of each underlying investment's leverage and Net Asset Value as of March 31, 2021.

New York City Fire Pension Fund, Subchapter 2
Infrastructure Portfolio
As of March 31, 2021

Vintage Year	Investment	Closing Date	Committed Capital	Contributed Capital	Distributed Capital	Market Value	TVPI	IRR
Active Investments:								
2013	Brookfield Infrastructure Fund II, L.P.	7/8/2013	\$15,000,000	\$12,733,154	\$5,729,330	\$17,160,923	1.8x	13.0%
2014	IFM Global Infrastructure Fund	1/2/2014	\$10,000,000	\$13,351,525	\$5,266,542	\$16,239,839	1.6x	11.2%
2014	Global Energy & Power Infrastructure Fund II	4/16/2014	\$10,000,000	\$10,560,000	\$8,665,238	\$5,839,083	1.4x	20.7%
2014	KKR Global Infrastructure Investors II L.P.	6/12/2015	\$12,000,000	\$12,888,222	\$11,246,128	\$10,535,528	1.7x	18.4%
2016	Global Infrastructure Partners III-A/B, L.P.	1/29/2016	\$22,000,000	\$19,897,578	\$4,295,542	\$19,728,204	1.2x	7.1%
2016	Brookfield Infrastructure Fund III, L.P.	4/15/2016	\$19,000,000	\$11,780,071	\$3,230,679	\$11,817,653	1.3x	9.9%
2016	Actis Energy 4	12/16/2016	\$12,900,000	\$9,915,027	\$2,937,710	\$9,868,000	1.3x	12.3%
2017	EQT Infrastructure III (No.2) SCSp	2/18/2017	\$11,242,261	\$11,816,804	\$1,750,269	\$16,081,885	1.5x	19.2%
2016	ASF VII Infrastructure L.P.	4/24/2017	\$15,000,000	\$8,846,246	\$650,721	\$10,534,683	1.3x	16.9%
2017	Axiom Infrastructure North America (2017)	8/14/2017	\$15,220,450	\$15,624,979	\$2,960,734	\$16,262,744	1.2x	9.9%
2017	NYCRS EIG Energy Partners, L.P.	8/14/2017	\$15,300,000	\$5,867,517	\$1,410,336	\$5,212,939	1.1x	7.9%
2021	NYCRS EIG Energy Partners Co-Investment, L.P.	1/12/2018	\$3,820,000	-	-	-	-	0.0%
2018	KKR Global Infrastructure Investors III L.P.	3/29/2018	\$17,200,000	\$8,509,357	\$606,143	\$6,975,251	0.9x	-8.9%
2019	Global Energy & Power Infrastructure Fund III, L.P.	7/3/2018	\$17,200,000	\$6,609,664	\$982,055	\$6,228,121	1.1x	11.0%
2018	Cardinal NR Sidecar Holdings L.P.	10/5/2018	\$2,060,000	\$2,073,203	\$511,871	\$2,583,715	1.5x	18.8%
2018	EQT Infrastructure IV (No.2) USD SCSp	12/20/2018	\$20,000,000	\$12,136,379	\$473,250	\$13,249,108	1.1x	11.0%
2019	Ardian Infrastructure Fund V B	3/4/2019	\$16,227,199	\$1,927,137	\$96,213	\$1,990,687	1.1x	6.5%
2018	Global Infrastructure Partners IV-A/B, L.P.	3/11/2019	\$24,700,000	\$2,414,493	\$0	\$1,664,371	0.7x	-64.6%
2019	Brookfield Infrastructure Fund IV, L.P.	5/10/2019	\$21,000,000	\$10,719,395	\$1,283,154	\$10,835,445	1.1x	12.0%
2020	EQT Infrastructure IV Co-Investment (B) SCSp (Saber)	7/30/2019	\$1,800,000	\$1,818,000	\$109,250	\$2,039,187	1.2x	16.9%
2019	Brookfield Infrastructure Fund IV Co-Investment (Snow)	10/25/2019	\$2,000,000	\$2,008,446	\$133,054	\$2,210,604	1.2x	12.5%
2020	EQT Infrastructure IV Co-Investment (G) SCSp (Lightspeed)	6/11/2020	\$3,068,600	\$3,078,707	-	\$3,122,191	NM	NM
2020	BIS NYC Infrastructure Emerging Manager Opportunities Fund, L.P.	7/3/2020	\$14,980,000	\$815,743	-	\$805,964	NM	NM
2020	EQT Infrastructure IV Co-Investment (F) SCSp (Connect)	8/18/2020	\$2,300,000	\$2,308,214	-	\$2,609,365	NM	NM
2020	EQT Infrastructure V (No.2) USD SCSp	10/29/2020	\$40,000,000	-	-	(\$555,992)	NM	NM
2021	Stonepeak Infrastructure Fund IV, L.P.	2/16/2021	\$35,000,000	-	-	(\$222,133)	NM	NM
Total			\$379,018,509	\$187,699,861	\$52,338,221	\$192,817,366	1.3x	12.0%

Note: IRRs presented are interim estimates and may not be indicative of the ultimate performance of fund investments due to a number of factors, such as the lack of industry valuation standards and the differences in the investment pace and strategy of various funds. Until a fund is liquidated, typically over 10 to 12 years, the IRR is only an interim estimated return. The IRR calculated in the early years of a fund is usually not meaningful given the J-Curve effect. The actual IRR performance of any fund is not known until all capital contributed and earnings have been distributed to the investor. The IRRs contained in this report are calculated by StepStone Group LP, a consultant to the New York City Retirement Systems, based on information provided by the general partners of each investment (e.g. cash flows and valuations). The IRR calculations and other information contained in this report have not been reviewed or confirmed by the general partners. The result of the IRR calculation may differ from that generated by the general partner or other limited partners. Differences in IRR calculations can be affected by cash-flow timing, the accounting treatment of carried interest, fund management fees, advisory fees, organizational fees, other fund expenses, sale of distributed stock, and valuations.

Risk Quarterly Report (Public):

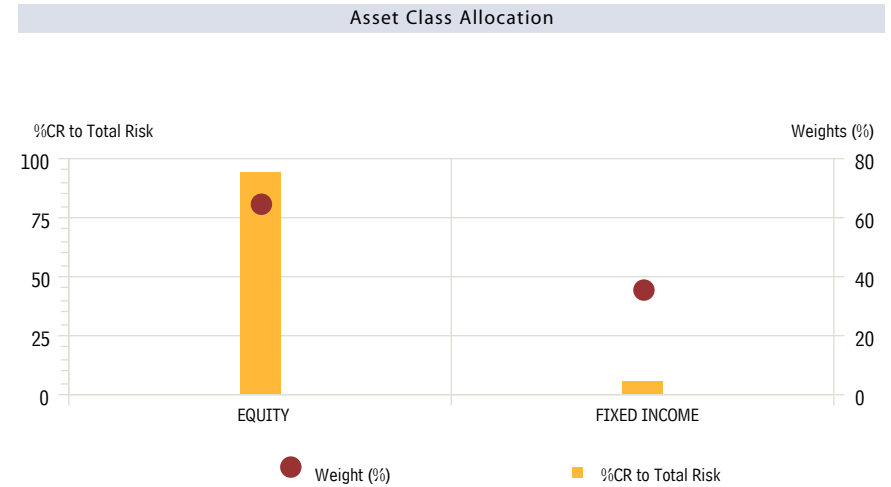
BarraOne Total Plan Summary

COMPANY: NYCRC - Fire Plan
PORTFOLIO: FIRE_Total Plan
BENCHMARK: FIRE_Policy
POSITIONS: 14,586

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 18,841,441,848
ACCEPTED: 14,431

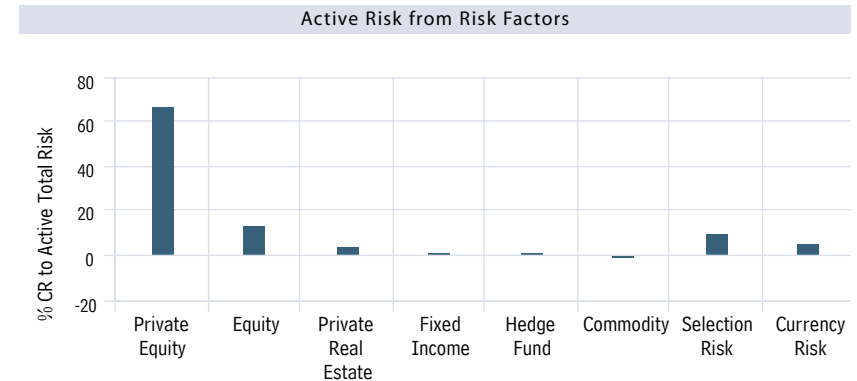
Total Plan Summary

Risk Summary		Asset Class Contribution to Risk				
Statistic	Value	Asset Class	Mkt Value	Weight (%)	Total Risk	Risk Contribution
Total Risk	11.82	Total	18,841,441,848	100.00	11.82	11.82
Benchmark Risk	11.92	EQUITY	12,194,922,239	64.72	17.37	11.16
Active Risk	1.43	FIXED INCOME	6,646,519,608	35.28	4.28	0.66
Portfolio Beta	0.98					
Effective Duration	2.89					



Risk Factor Breakdown

Risk Decomposition						
Risk Source	Portfolio			Active		
	Risk Contribution	% Risk	Correlation	Risk Contribution	% Risk	Correlation
Total Risk	11.82	100.00	1.00	1.43	100.00	1.00
Local Market Risk	11.33	95.92	1.00	1.36	95.14	0.97
Common Factor Risk	11.30	95.63	1.00	1.23	85.97	0.92
Equity	10.35	87.60	0.98	0.20	13.65	0.38
Fixed Income	0.44	3.75	0.29	0.02	1.59	0.10
Hedge Fund	0.00	0.01	0.01	0.01	0.68	0.08
Private Real Estate	0.42	3.53	0.71	0.06	4.06	0.26
Commodity	-0.03	-0.22	-0.42	-0.00	-0.05	-0.01
Private Equity	0.11	0.97	0.10	0.94	66.04	0.81
Selection Risk	0.03	0.29	0.05	0.13	9.17	0.30
Currency Risk	0.48	4.08	0.46	0.07	4.86	0.20



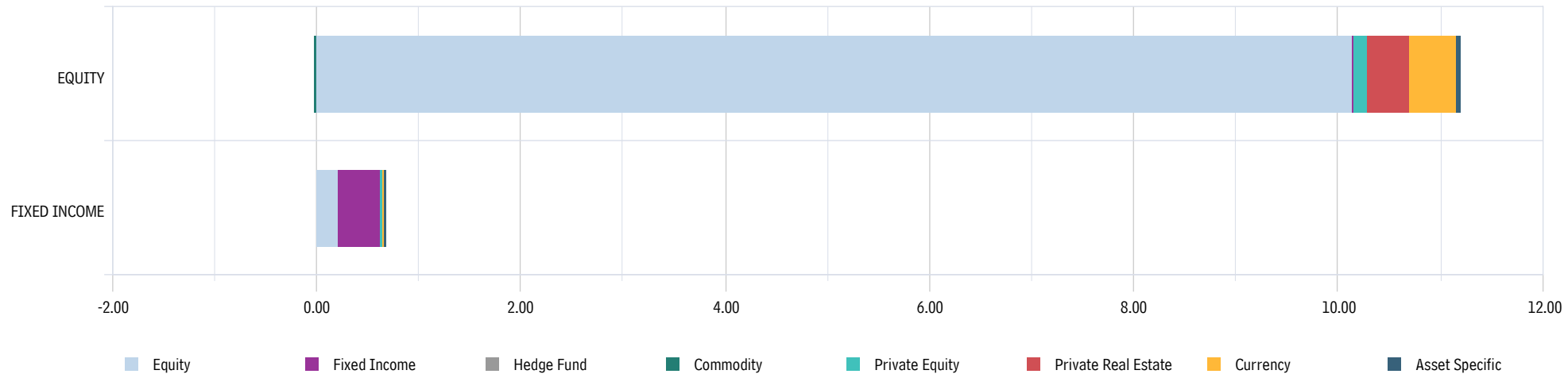
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Risk Contribution Breakdown by Risk Type

Asset Name	Mkt Value	Weight (%)	Eff Weight (%)	Total Risk	%CR to Total Risk	Port Risk Contribution	Risk Contribution							
							Equity	Fixed Income	Hedge Fund	Commodity	Private Real Estate	Private Equity	Currency	Asset Specific
Total	18,841,441,848	100.00	-	11.82	100.00	11.82	10.35	0.44	0.00	-0.03	0.42	0.11	0.48	0.03
EQUITY	12,194,922,239	64.72	-	17.37	94.45	11.16	10.14	0.02	0.00	-0.03	0.42	0.11	0.46	0.03
FIXED INCOME	6,646,519,608	35.28	-	4.28	5.55	0.66	0.21	0.42	0.00	0.00	0.00	0.01	0.02	0.00



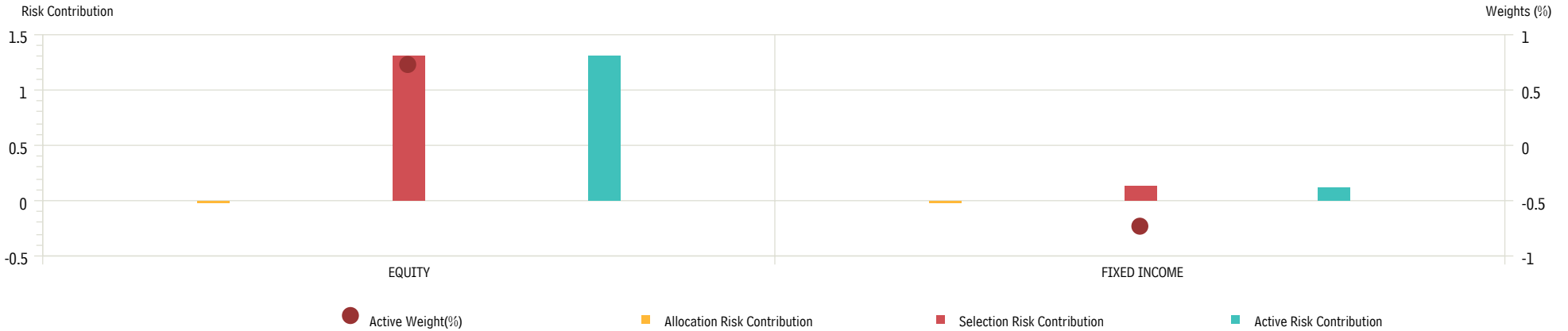
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Allocation Selection

Asset Class	Active Weight(%)	Allocation			Selection			Active	
		Volatility	Correlation	Risk Contribution	Volatility	Correlation	Risk Contribution	Risk Contribution	
Active Total Risk				-0.02			1.45	1.43	
EQUITY	0.72	5.68	-0.15	-0.01	2.07	0.98	1.31	1.30	
FIXED INCOME	-0.72	10.10	0.15	-0.01	1.05	0.36	0.14	0.12	



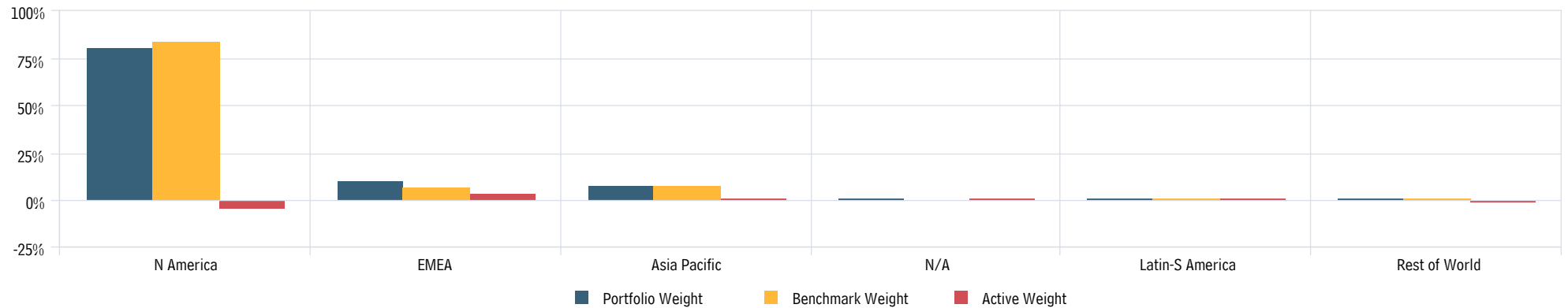
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Portfolio Allocation by Region

Region	Weight (%)			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
	Portfolio	Benchmark	Active				
Total	100.00	100.00	0.00	11.82	1.43	100.00	0.01
N America	79.94	84.26	-4.32	10.95	1.18	82.90	0.01
EMEA	10.30	7.19	3.11	17.89	0.19	13.11	0.03
Asia Pacific	8.10	7.57	0.52	17.91	0.03	2.24	0.02
N/A	0.75	0.00	0.75	12.71	0.02	1.13	0.02
Latin-S America	0.57	0.52	0.05	31.44	0.01	0.66	0.03
Rest of World	0.34	0.46	-0.12	6.74	-0.00	-0.04	0.02



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Top 30 Countries by Weight%

Country of Exposure	Weight (%)			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
	Portfolio	Benchmark	Active				
Total	100.00	100.00	0.00	11.82	1.43	100.00	0.01
United States	77.49	82.39	-4.90	10.80	1.16	80.93	0.01
United Kingdom	2.48	1.54	0.94	20.71	0.06	3.96	0.03
China International	2.20	1.96	0.24	23.55	0.01	0.45	0.02
Japan	1.71	1.98	-0.27	15.73	0.00	0.02	0.01
Germany	1.43	0.83	0.60	18.52	0.03	2.07	0.03
France	1.17	1.01	0.15	20.64	0.01	0.76	0.03
S. Korea	1.14	0.80	0.35	27.27	0.01	0.68	0.02
Canada	1.09	1.45	-0.36	15.53	0.01	0.42	0.02
Switzerland	1.09	0.84	0.24	14.70	0.01	0.83	0.03
India	1.06	0.60	0.46	26.63	0.02	1.06	0.03
Taiwan	1.03	0.84	0.19	24.63	0.00	0.34	0.02
Netherlands	0.77	0.53	0.24	20.16	0.01	0.78	0.03
Brazil	0.59	0.33	0.26	39.65	0.01	0.96	0.04
Hong Kong	0.56	0.28	0.28	18.32	0.01	0.41	0.02
Italy	0.51	0.28	0.24	20.86	0.01	1.00	0.04
Australia	0.47	0.64	-0.18	25.52	-0.00	-0.18	0.01
Denmark	0.46	0.21	0.25	18.54	0.01	0.76	0.04
Sweden	0.44	0.31	0.13	24.17	0.01	0.74	0.04
Spain	0.44	0.22	0.22	20.82	0.01	0.56	0.03
N/A	0.42	0.00	0.42	18.44	0.01	0.50	0.02
Hong Kong	0.34	0.00	0.34	13.46	0.01	0.61	0.03
China	0.31	0.43	-0.12	24.72	-0.00	-0.10	0.02
Russia	0.28	0.22	0.06	29.10	0.00	0.10	0.02
Ireland	0.20	0.15	0.05	13.10	0.00	0.19	0.03
Singapore	0.18	0.15	0.03	20.52	0.00	0.28	0.01
South Africa	0.18	0.21	-0.03	34.40	-0.00	-0.06	0.02
Belgium	0.16	0.13	0.04	18.61	0.00	0.21	0.03
Luxembourg	0.14	0.20	-0.06	8.83	-0.00	-0.04	0.02
Poland	0.13	0.04	0.09	29.74	0.01	0.41	0.06
Norway	0.13	0.05	0.07	29.87	0.00	0.26	0.04

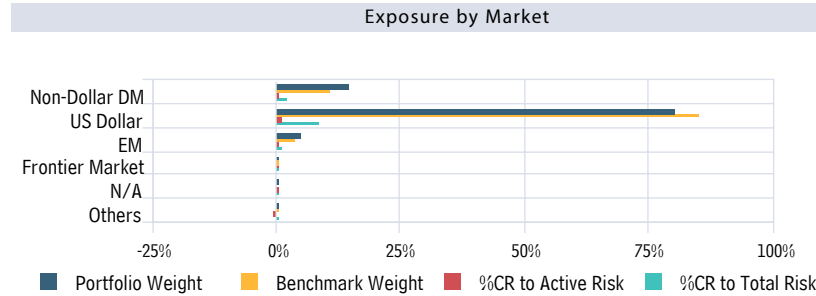


BarraOne Total Plan Summary

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Portfolio Allocation by Currency



Developed Market Currency				Emerging Market Currency			
Top Five	Exposure \$	CR to AR (%)	CR to TR (%)	Top Five	Exposure \$	CR to AR (%)	CR to TR (%)
US Dollar	15,154,387,692.10	81.90	71.23	Korean Won	206,401,118.08	0.61	1.95
Euro	932,857,892.82	6.86	7.21	Indian Rupee	197,783,802.17	1.06	1.55
Hong Kong Dollar	449,046,705.33	0.58	3.07	New Taiwan Dollar	193,371,225.98	0.34	1.36
British Pound Sterling	392,066,788.97	3.89	3.65	Brazilian Real	106,721,250.56	0.96	1.29
Japanese Yen	316,038,567.76	0.11	1.63	Chinese Yuan	56,205,865.68	0.05	0.37

Top 15 Currencies by Weight%

Currency of Exposure	Weight (%)			Total Risk	CR to TR	CR to TR (%)	CR to AR	CR to AR (%)
	Portfolio	Benchmark	Active					
Total	100.00	100.00	0.00	11.82	11.82	100.00	1.43	100.00
US Dollar	80.43	85.25	-4.82	10.61	8.42	71.23	1.17	81.90
Euro	4.95	2.69	2.26	19.32	0.85	7.21	0.10	6.86
Hong Kong Dollar	2.38	2.03	0.35	22.35	0.36	3.07	0.01	0.58
British Pound Sterling	2.08	1.16	0.92	24.32	0.43	3.65	0.06	3.89
Japanese Yen	1.68	1.87	-0.20	16.01	0.19	1.63	0.00	0.11
Korean Won	1.10	0.79	0.30	27.49	0.23	1.95	0.01	0.61
Indian Rupee	1.05	0.59	0.46	26.84	0.18	1.55	0.02	1.06
New Taiwan Dollar	1.03	0.84	0.19	24.63	0.16	1.36	0.00	0.34
Swiss Franc	1.02	0.79	0.23	15.54	0.13	1.10	0.01	0.81
Canadian Dollar	0.62	0.92	-0.30	24.24	0.13	1.12	0.01	0.45
Brazilian Real	0.57	0.31	0.25	40.81	0.15	1.29	0.01	0.96
Danish Krone	0.46	0.21	0.26	18.54	0.06	0.51	0.01	0.76
Australian Dollar	0.43	0.58	-0.15	27.23	0.10	0.85	-0.00	-0.15
Swedish Krona	0.32	0.30	0.01	24.11	0.06	0.55	0.01	0.45
Chinese Yuan	0.30	0.29	0.01	25.78	0.04	0.37	0.00	0.05

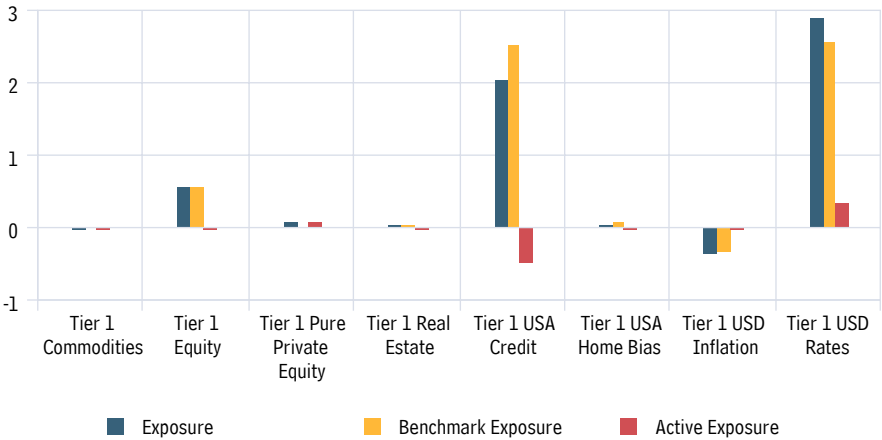
BarraOne Tier 1 USA Factor Summary

Tier 1 factors describe the most important drivers of the markets and provide a platform for the factor-based asset-allocation framework. They provide a lens for strategic asset allocation and are designed for board level reporting.

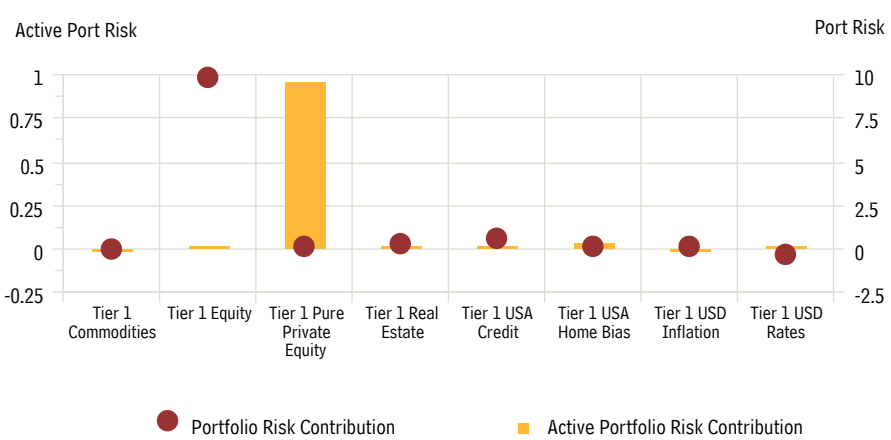
COMPANY: NYCRS - Fire Plan
PORTFOLIO: FIRE_Total Plan
BENCHMARK: FIRE_Policy
POSITIONS: 14,586
MODEL: MAC.L Tier 1 USA

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 18,841,441,052
ACCEPTED: 14,431

Macro Factor Exposures



Macro Factor Risk Contribution



BarraOne Tier 1 USA Factor Summary

Tier 1 factors describe the most important drivers of the markets and provide a platform for the factor-based asset-allocation framework. They provide a lens for strategic asset allocation and are designed for board level reporting.

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PORTFOLIO: FIRE_Total Plan
BENCHMARK: FIRE_Policy
POSITIONS: 14,586
MODEL: MAC.L Tier 1 USA

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 18,841,441,052
ACCEPTED: 14,431

Risk Decomposition								Tier 1 Macro Factor Scheme has six factors				
Risk Source	Exposure			Contribution				Tier 1 Factor	Exposure Type	Description		
	Exposure	Benchmark Exposure	Active Exposure	Portfolio Risk Contribution	% Portfolio Risk	Active Portfolio Risk Contribution	% Active Risk					
Total Risk	-	-	-	11.81	100.00	1.43	100.00	Equity	Membership (weights)	USA Equity		
Local Market Risk	-	-	-	11.33	95.92	1.36	95.15	Pure Private Equity	Membership (weights)	USA Private Equity		
Common Factor Risk	-	-	-	11.30	95.63	1.23	85.98	Real Estate	Membership (weights)	USA Real Estate		
Core Factors	-	-	-	10.77	91.16	1.00	70.12	USA Credit	Sensitivities (durations)	Sensitive to USA credit spreads		
Tier 1 Commodities	-0.00	0.00	-0.00	-0.02	-0.15	-0.00	-0.09	USD Inflation	Sensitivities (durations)	Sensitive to USD inflation protected assets		
Tier 1 Equity	0.57	0.57	-0.01	9.87	83.57	0.00	0.34	USD Rates	Sensitivities (durations)	Sensitive to Govt rate exposure		
Tier 1 Pure Private Equity	0.07	0.00	0.07	0.12	0.97	0.95	66.56	Commodities	Membership (weights)	Sensitive to Commodities		
Tier 1 Real Estate	0.04	0.05	-0.01	0.32	2.69	0.01	0.54	USA Home Bias		USA Home Bias factor returns is very similar to that of a portfolio long the MSCI USA IMI index and short the currency-hedged MSCI ACWI ex-US IMI index.		
Tier 1 USA Credit	2.04	2.52	-0.48	0.55	4.68	0.00	0.11					
Tier 1 USA Home Bias	0.05	0.08	-0.03	0.14	1.22	0.03	2.25					
Tier 1 USD Inflation	-0.36	-0.34	-0.02	0.11	0.97	-0.00	-0.01					
Tier 1 USD Rates	2.89	2.55	0.35	-0.33	-2.79	0.01	0.42					
Factor Residual Risk	-	-	-	0.53	4.47	0.23	15.86					
Interaction within Common Factor Risk	-	-	-	N/A	-	N/A	-					
Specific Risk	-	-	-	0.03	0.29	0.13	9.17					
Currency Risk	-	-	-	0.48	4.08	0.07	4.85					
Currency/Market Interaction	-	-	-	N/A	-	N/A	-					

Factor Residual Risk

Risk Source	Portfolio Risk Contribution	% Portfolio Risk	Active Portfolio Risk Contribution	% Active Risk
Commodity	-0.01	-0.07	0.00	0.04
Equity	0.33	2.81	0.16	11.07
Fixed Income	0.11	0.89	0.02	1.09
Hedge Fund	0.00	0.01	0.01	0.68
Interaction within Factor Residual Risk	N/A	-	N/A	-
Private Equity	-0.00	-0.01	-0.01	-0.54
Private Real Estate	0.10	0.83	0.05	3.52

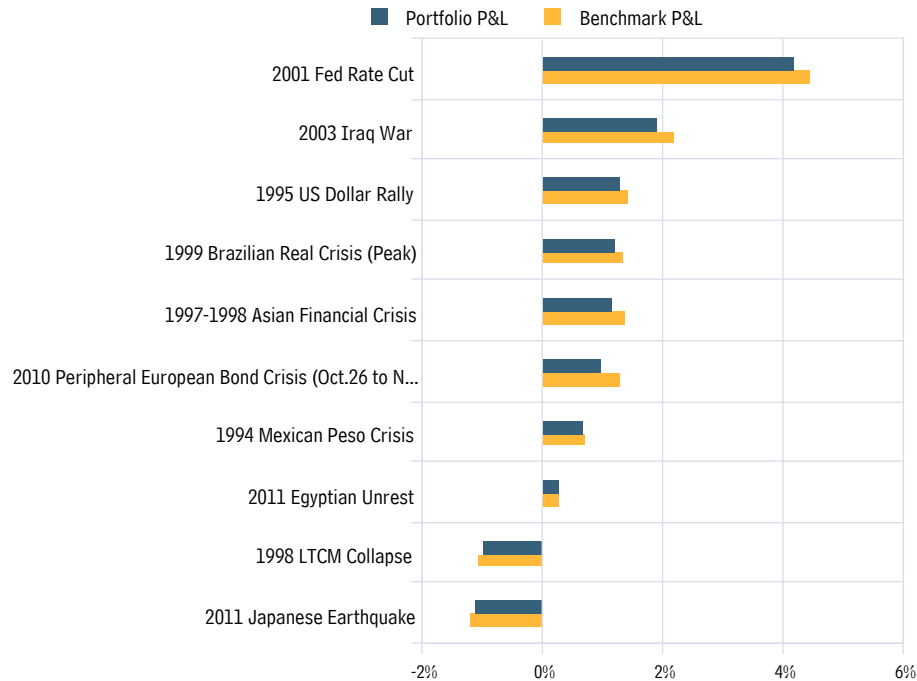
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MODEL: MAC.L

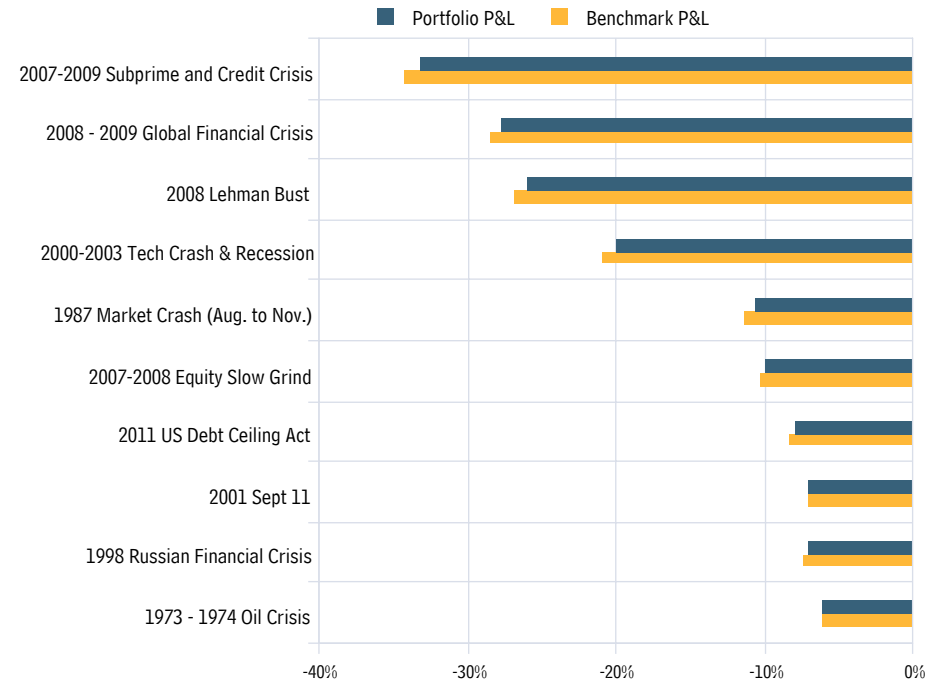
CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 18,841,441,848
ACCEPTED: 14,431

Stress Scenarios

Top 10 Best Scenarios			
Scenario	Portfolio P&L	Benchmark P&L	Market Change (\$)
2001 Fed Rate Cut	4.20	4.45	790,824,409
2003 Iraq War	1.93	2.17	363,442,242
1995 US Dollar Rally	1.29	1.44	242,898,493
1999 Brazilian Real Crisis (Peak)	1.20	1.32	226,789,836
1997-1998 Asian Financial Crisis	1.14	1.37	214,659,780
2010 Peripheral European Bond Crisis (Oc	0.97	1.27	182,957,135
1994 Mexican Peso Crisis	0.65	0.71	121,541,864
2011 Egyptian Unrest	0.25	0.26	47,612,357
1998 LTCM Collapse	-1.00	-1.05	-187,639,753
2011 Japanese Earthquake	-1.12	-1.20	-211,003,743



Top 10 Worst Scenarios			
Scenario	Portfolio P&L	Benchmark P&L	Market Change (\$)
2007-2009 Subprime and Credit Crisis	-33.08	-34.22	-6,232,164,826
2008 - 2009 Global Financial Crisis	-27.78	-28.55	-5,234,168,613
2008 Lehman Bust	-25.98	-26.93	-4,894,569,641
2000-2003 Tech Crash & Recession	-19.92	-20.88	-3,753,397,852
1987 Market Crash (Aug. to Nov.)	-10.57	-11.42	-1,992,058,178
2007-2008 Equity Slow Grind	-9.90	-10.30	-1,865,604,023
2011 US Debt Ceiling Act	-7.96	-8.28	-1,500,058,406
2001 Sept 11	-7.04	-7.06	-1,326,991,906
1998 Russian Financial Crisis	-7.01	-7.34	-1,319,995,690
1973 - 1974 Oil Crisis	-6.10	-6.11	-1,150,196,587



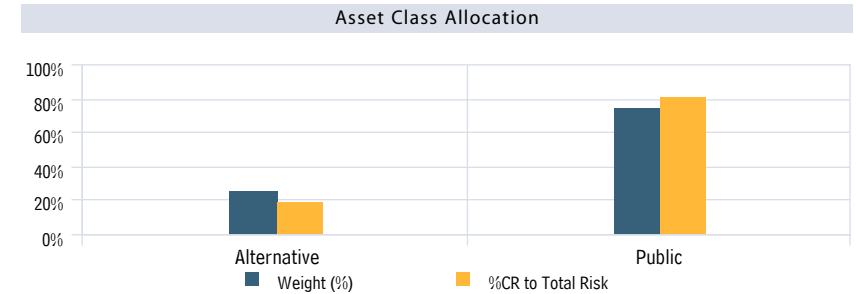
BarraOne Equity Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: EQUITY
BENCHMARK: EQUITY
POSITIONS: 6,438
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 12,194,921,443
ACCEPTED: 6,383

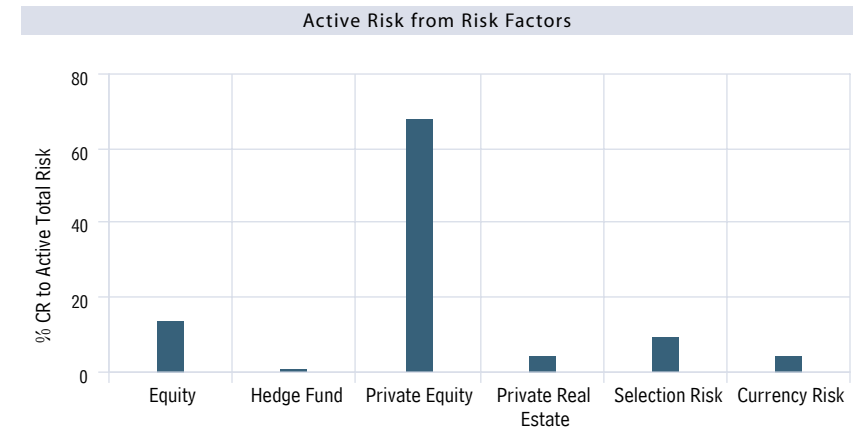
Total Plan Summary

Risk Summary		Asset Class Contribution to Risk					
Statistic	Value	Asset Class	Mkt Value	Weight (%)	Total Risk	Risk Contribution	%CR to TR
Total Risk	17.37	Total	12,194,921,443	100.00	17.37	17.37	100.00
Benchmark Risk	17.36	Alternative	3,169,910,043	25.99	14.52	3.44	19.79
Active Risk	2.07	Public	9,025,011,400	74.01	18.94	13.93	80.21
Portfolio Beta	0.99						



Risk Factor Breakdown

Risk Decomposition						
Risk Source	Portfolio			Active		
	Risk Contribution	% Risk	Correlation	Risk Contribution	% Risk	Correlation
Total Risk	17.37	100.00	1.00	2.07	100.00	1.00
Local Market Risk	16.68	96.02	1.00	1.98	95.62	0.98
Common Factor Risk	16.62	95.72	1.00	1.78	85.92	0.92
Equity	15.84	91.19	0.99	0.28	13.64	0.40
Style	0.12	0.72	0.31	0.08	3.94	0.17
Industry	0.21	1.23	0.25	0.08	4.04	0.24
Country	-0.01	-0.04	-0.06	0.00	0.10	0.03
Market	15.50	89.28	0.99	0.12	5.56	0.22
Fixed Income	0.02	0.12	0.24	-0.00	-0.01	-0.00
Spread	0.05	0.28	0.71	0.01	0.33	0.10
Term Structure	-0.03	-0.17	-0.29	-0.01	-0.24	-0.06
Hedge Fund	0.00	0.01	0.01	0.02	0.77	0.09
Private Real Estate	0.64	3.66	0.70	0.08	4.09	0.24
Commodity	-0.04	-0.23	-0.41	-0.00	-0.20	-0.04
Private Equity	0.17	0.96	0.10	1.40	67.62	0.82
Selection Risk	0.05	0.31	0.06	0.20	9.70	0.31
Currency Risk	0.69	3.98	0.45	0.09	4.38	0.20



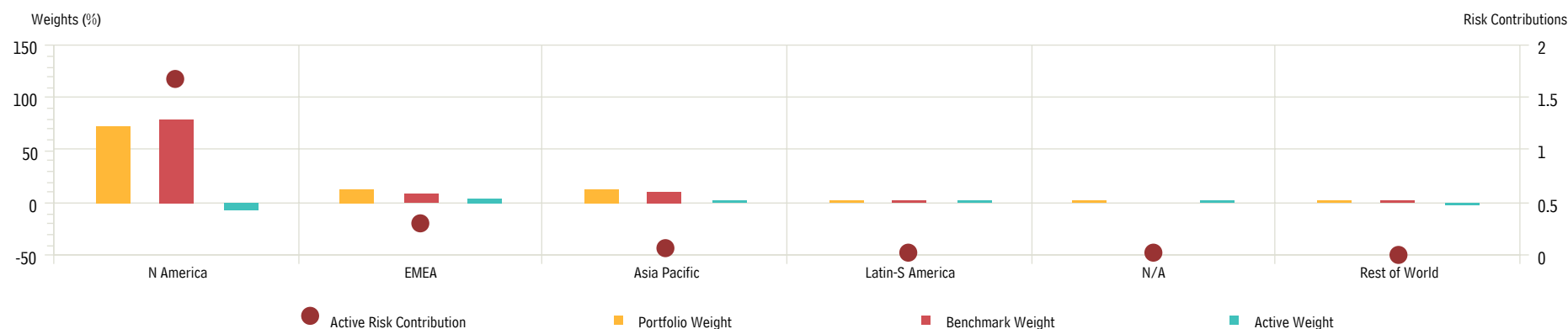
BarraOne Equity Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: EQUITY
BENCHMARK: EQUITY
POSITIONS: 6,438
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 12,194,921,443
ACCEPTED: 6,383

Portfolio Allocation by Region

Region	Weight (%)			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
	Portfolio	Benchmark	Active				
Total	100.00	100.00	-0.00	17.37	2.07	100.00	0.02
Asia Pacific	12.35	11.20	1.15	18.13	0.07	3.29	0.02
EMEA	13.64	9.22	4.43	19.85	0.31	15.03	0.04
Latin-S America	0.75	0.71	0.04	35.96	0.01	0.66	0.05
N America	72.62	78.70	-6.09	17.73	1.67	80.44	0.02
N/A	0.52	0.00	0.52	13.39	0.01	0.53	0.02
Rest of World	0.12	0.17	-0.05	22.99	0.00	0.05	0.03



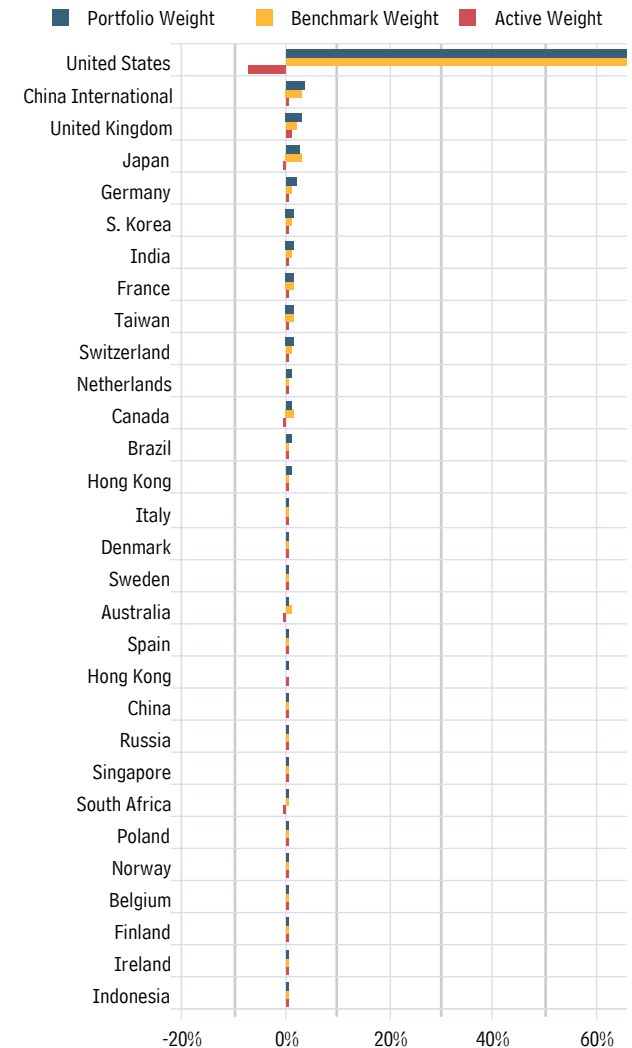
BarraOne Equity Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: EQUITY
BENCHMARK: EQUITY
POSITIONS: 6,438
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 12,194,921,443
ACCEPTED: 6,383

Top 30 Countries by Weight%

Country of Exposure	Weight (%)			Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active				
Total	100.00	100.00	-0.00	17.37	2.07	100.00	0.02
United States	69.58	76.60	-7.02	17.68	1.61	77.67	0.01
China International	3.39	3.06	0.33	23.55	0.01	0.58	0.02
United Kingdom	3.08	1.82	1.26	24.41	0.10	4.76	0.04
Japan	2.59	2.93	-0.34	16.03	0.00	0.06	0.01
Germany	1.93	1.19	0.74	19.71	0.04	2.11	0.03
S. Korea	1.75	1.24	0.51	27.54	0.02	0.98	0.02
India	1.62	0.93	0.69	26.84	0.03	1.39	0.03
France	1.61	1.46	0.16	21.19	0.01	0.58	0.03
Taiwan	1.59	1.31	0.28	24.63	0.01	0.50	0.02
Switzerland	1.58	1.24	0.34	15.53	0.02	1.04	0.02
Netherlands	1.02	0.55	0.47	23.17	0.03	1.25	0.03
Canada	0.99	1.44	-0.44	24.88	0.01	0.48	0.02
Brazil	0.88	0.49	0.39	40.81	0.03	1.23	0.04
Hong Kong	0.86	0.41	0.45	18.41	0.01	0.59	0.01
Italy	0.74	0.31	0.42	22.06	0.02	1.17	0.04
Denmark	0.70	0.33	0.38	18.63	0.02	0.88	0.03
Sweden	0.67	0.48	0.20	24.46	0.02	0.93	0.04
Australia	0.67	0.91	-0.24	27.25	-0.00	-0.15	0.01
Spain	0.59	0.31	0.28	23.92	0.01	0.64	0.03
Hong Kong	0.52	0.00	0.52	13.46	0.01	0.53	0.01
China	0.47	0.45	0.02	25.53	0.00	0.11	0.01
Russia	0.43	0.31	0.12	29.10	0.00	0.20	0.02
Singapore	0.28	0.13	0.15	20.59	0.00	0.18	0.02
South Africa	0.27	0.33	-0.06	34.79	-0.00	-0.07	0.02
Poland	0.20	0.07	0.14	29.74	0.01	0.49	0.06
Norway	0.20	0.08	0.12	29.86	0.01	0.36	0.04
Belgium	0.19	0.12	0.07	23.22	0.01	0.27	0.03
Finland	0.18	0.13	0.05	21.28	0.00	0.19	0.03
Ireland	0.15	0.09	0.06	23.53	0.00	0.17	0.03
Indonesia	0.15	0.10	0.05	36.06	0.00	0.08	0.02

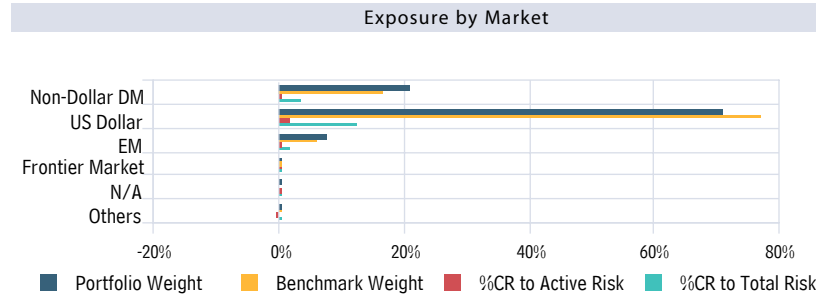


BarraOne Equity Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: EQUITY
BENCHMARK: EQUITY
POSITIONS: 6,438
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 12,194,921,443
ACCEPTED: 6,383

Portfolio Allocation by Currency



Developed Market Currency				Emerging Market Currency			
Top Five	Exposure \$	CR to AR (%)	CR to TR (%)	Top Five	Exposure \$	CR to AR (%)	CR to TR (%)
US Dollar	8,673,749,128.53	79.33	70.85	Korean Won	206,401,203.75	0.89	2.05
Euro	798,568,666.26	6.60	6.67	Indian Rupee	197,783,868.41	1.39	1.62
Hong Kong Dollar	449,045,442.11	0.85	3.23	New Taiwan Dollar	193,371,318.87	0.50	1.42
British Pound Sterling	368,912,529.22	4.73	3.68	Brazilian Real	106,721,285.78	1.23	1.36
Japanese Yen	315,600,775.90	0.06	1.71	Chinese Yuan	56,176,066.82	0.11	0.39

Top 15 Currencies by Weight%

Currency of Exposure	Weight (%)			Total Risk	CR to TR	CR to TR (%)	CR to AR	CR to AR (%)
	Portfolio	Benchmark	Active					
Total	100.00	100.00	-0.00	17.37	17.37	100.00	2.07	100.00
US Dollar	71.13	76.95	-5.83	17.54	12.30	70.85	1.64	79.33
Euro	6.55	4.21	2.34	19.84	1.16	6.67	0.14	6.60
Hong Kong Dollar	3.68	3.18	0.51	22.35	0.56	3.23	0.02	0.85
British Pound Sterling	3.03	1.82	1.21	24.63	0.64	3.68	0.10	4.73
Japanese Yen	2.59	2.93	-0.34	16.03	0.30	1.71	0.00	0.06
Korean Won	1.69	1.24	0.45	27.49	0.36	2.05	0.02	0.89
Indian Rupee	1.62	0.93	0.69	26.84	0.28	1.62	0.03	1.39
New Taiwan Dollar	1.59	1.31	0.28	24.63	0.25	1.42	0.01	0.50
Swiss Franc	1.58	1.24	0.34	15.54	0.20	1.15	0.02	1.04
Canadian Dollar	0.93	1.44	-0.51	25.27	0.21	1.18	0.01	0.40
Brazilian Real	0.88	0.49	0.39	40.81	0.24	1.36	0.03	1.23
Danish Krone	0.70	0.33	0.38	18.63	0.09	0.52	0.02	0.88
Australian Dollar	0.67	0.91	-0.24	27.25	0.16	0.90	-0.00	-0.15
Swedish Krona	0.49	0.48	0.01	24.28	0.10	0.58	0.01	0.53
Chinese Yuan	0.46	0.45	0.01	25.79	0.07	0.39	0.00	0.11

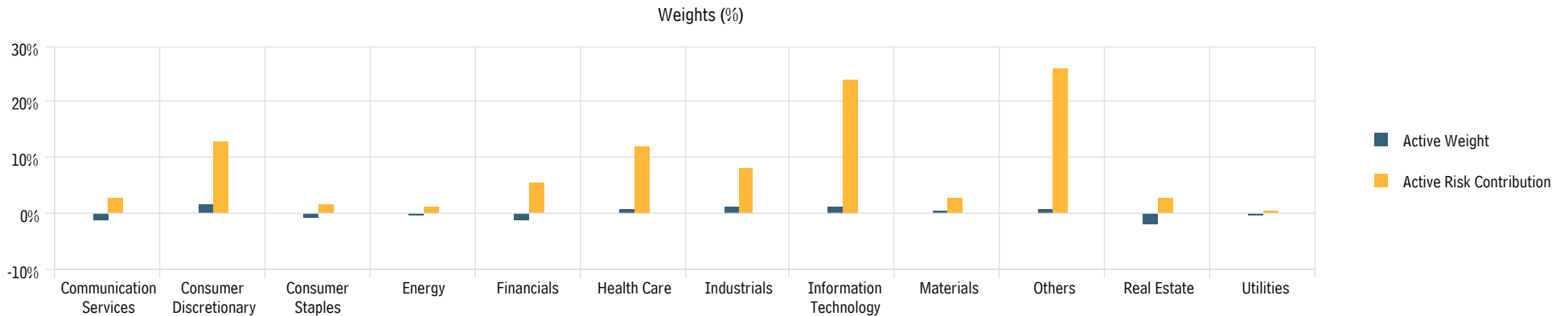
BarraOne Equity Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: EQUITY
BENCHMARK: EQUITY
POSITIONS: 6,438
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 12,194,921,443
ACCEPTED: 6,383

Portfolio Allocation by GICS Sector

GICS Sector	Weight (%)			Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active				
Total	100.00	100.00	-0.00	17.37	2.07	100.00	0.02
Communication Services	6.39	7.73	-1.34	19.81	0.06	2.86	0.00
Consumer Discretionary	12.25	10.61	1.63	23.36	0.27	12.92	0.02
Consumer Staples	4.45	5.07	-0.62	14.40	0.03	1.56	0.01
Energy	2.47	2.73	-0.26	32.30	0.03	1.28	0.03
Financials	10.01	11.22	-1.21	21.00	0.11	5.26	0.02
Health Care	10.89	10.15	0.74	16.74	0.25	11.86	0.02
Industrials	9.17	8.18	0.98	20.70	0.17	8.28	0.02
Information Technology	20.09	19.06	1.03	22.59	0.50	24.09	0.02
Materials	3.90	3.42	0.48	21.58	0.06	2.77	0.02
Others	16.41	15.63	0.79	9.13	0.54	25.83	-0.00
Real Estate	2.03	4.13	-2.11	22.09	0.06	2.71	-0.02
Utilities	1.94	2.07	-0.13	16.19	0.01	0.58	-0.00



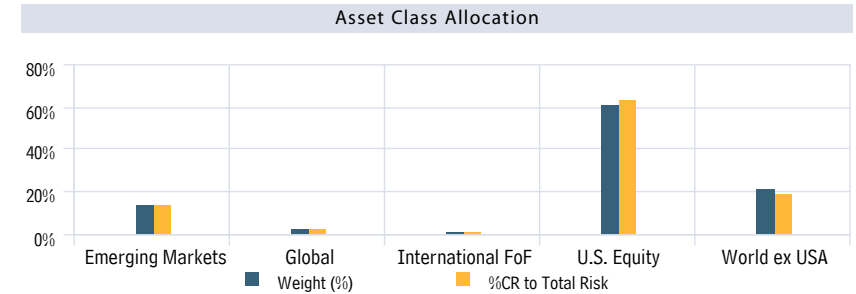
BarraOne Equity Summary

COMPANY: NYCRC - Fire Plan
PORTFOLIO: Public Equity
BENCHMARK: Public
POSITIONS: 6,025
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 9,025,011,400
ACCEPTED: 5,972

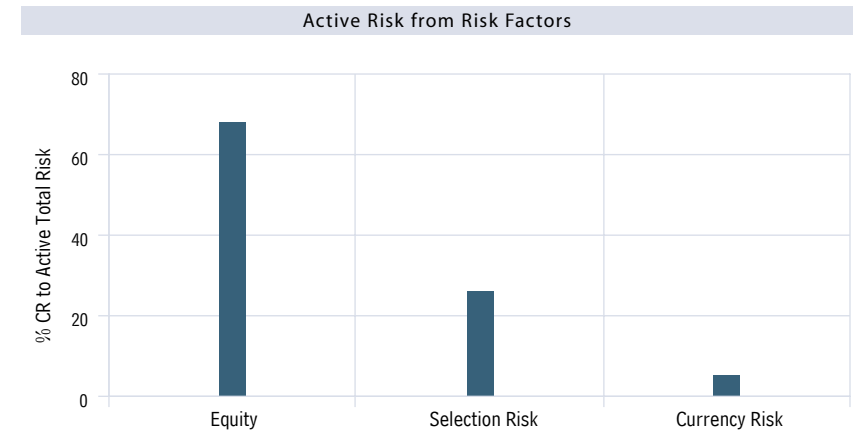
Total Plan Summary

Risk Summary		Asset Class Contribution to Risk					
Statistic	Value	Asset Class	Mkt Value	Weight (%)	Total Risk	Risk Contribution	%CR to TR
Total Risk	18.94	Total	9,025,011,400	100.00	18.94	18.94	100.00
Benchmark Risk	18.82	Emerging Markets	1,278,303,374	14.16	20.91	2.66	14.04
Active Risk	0.91	Global	192,297,871	2.13	21.07	0.42	2.21
Portfolio Beta	1.01	International FoF	87,588,804	0.97	18.93	0.17	0.91
		U.S. Equity	5,550,276,225	61.50	19.88	12.02	63.44
		World ex USA	1,916,545,127	21.24	18.25	3.68	19.41



Risk Factor Breakdown

Risk Decomposition						
Risk Source	Portfolio			Active		
	Risk Contribution	% Risk	Correlation	Risk Contribution	% Risk	Correlation
Total Risk	18.94	100.00	1.00	0.91	100.00	1.00
Local Market Risk	18.27	96.43	1.00	0.86	94.59	0.98
Common Factor Risk	18.19	96.02	1.00	0.62	68.27	0.84
Equity	18.19	96.02	1.00	0.62	68.29	0.84
Style	0.05	0.26	0.13	0.23	25.12	0.50
Industry	0.26	1.39	0.26	0.24	26.28	0.55
Country	-0.01	-0.05	-0.06	0.01	0.69	0.11
Market	17.89	94.43	0.99	0.15	16.19	0.33
Selection Risk	0.08	0.41	0.06	0.24	26.31	0.51
Currency Risk	0.68	3.57	0.46	0.05	5.41	0.28



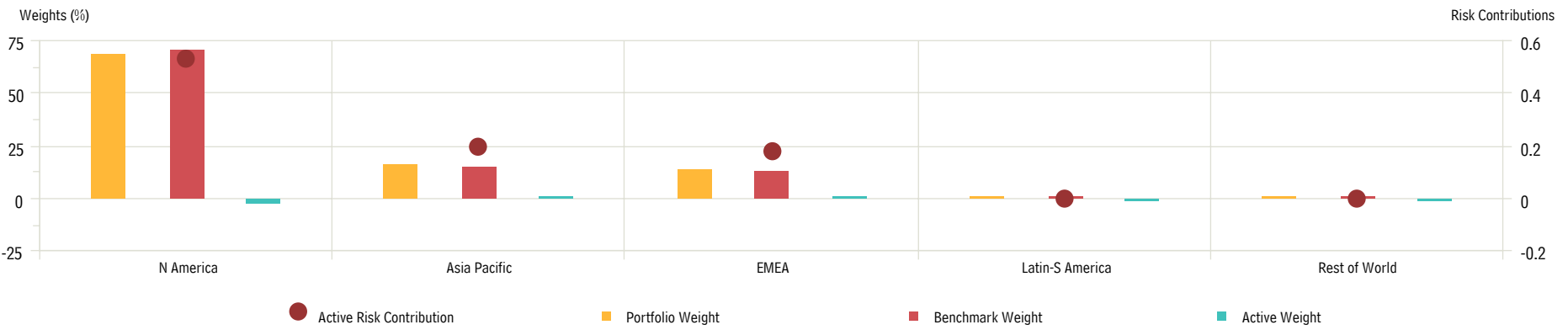
BarraOne Equity Summary

COMPANY: NYCRC - Fire Plan
 PORTFOLIO: Public Equity
 BENCHMARK: Public
 POSITIONS: 6,025
 MODEL: MAC.L

CURRENCY: USD
 ANALYSIS DATE: June 30, 2021
 MARKET VALUE: 9,025,011,400
 ACCEPTED: 5,972

Portfolio Allocation by Region

Region	Weight (%)			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
	Portfolio	Benchmark	Active				
Total	100.00	100.00	-0.00	18.94	0.91	100.00	0.01
Asia Pacific	15.86	15.25	0.61	18.38	0.19	21.38	0.03
EMEA	13.92	12.55	1.37	20.14	0.18	19.77	0.04
Latin-S America	0.91	0.96	-0.05	35.70	-0.00	-0.03	0.05
N America	69.18	71.00	-1.82	19.82	0.53	58.93	0.01
Rest of World	0.12	0.23	-0.11	25.53	-0.00	-0.05	0.02



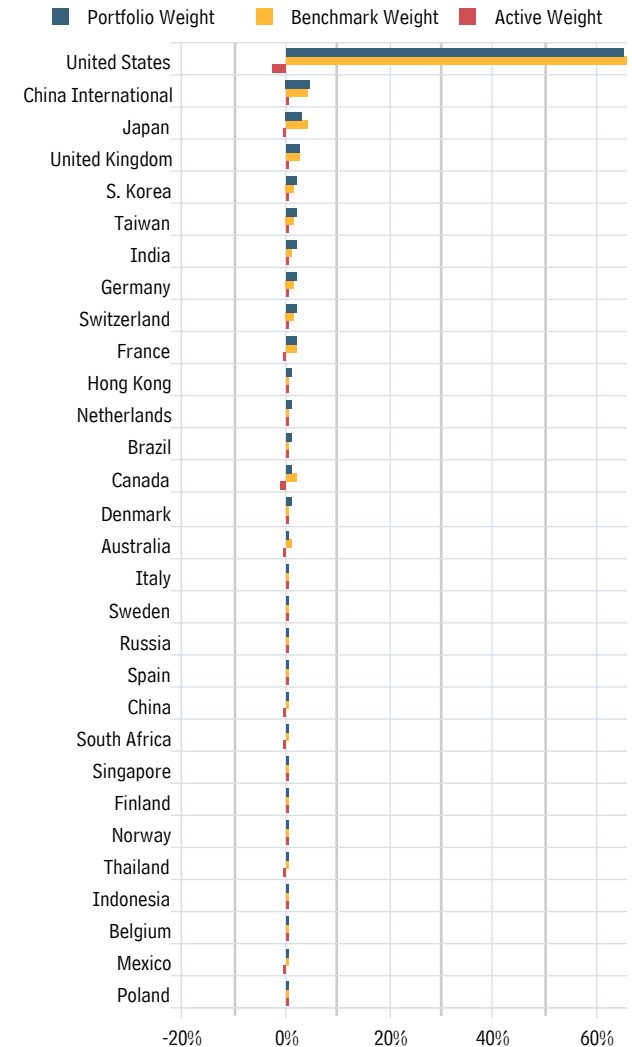
BarraOne Equity Summary

COMPANY: NYCRC - Fire Plan
PORTFOLIO: Public Equity
BENCHMARK: Public
POSITIONS: 6,025
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 9,025,011,400
ACCEPTED: 5,972

Top 30 Countries by Weight%

Country of Exposure	Weight (%)			Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active				
Total	100.00	100.00	-0.00	18.94	0.91	100.00	0.01
United States	65.45	68.15	-2.70	19.84	0.42	46.67	0.02
China International	4.55	4.17	0.38	23.54	0.03	3.16	0.07
Japan	3.28	3.99	-0.71	16.69	0.03	2.78	0.03
United Kingdom	2.77	2.47	0.30	24.98	0.06	6.84	0.06
S. Korea	2.33	1.69	0.64	27.71	0.05	5.87	0.08
Taiwan	2.14	1.78	0.36	24.63	0.03	3.31	0.07
India	2.03	1.26	0.76	27.05	0.06	6.47	0.08
Germany	1.88	1.62	0.26	21.62	0.03	2.89	0.07
Switzerland	1.87	1.69	0.19	15.35	0.02	1.84	0.04
France	1.84	1.98	-0.14	21.78	-0.01	-1.08	0.06
Hong Kong	1.16	0.56	0.60	18.49	0.03	3.18	0.06
Netherlands	1.12	0.75	0.37	24.71	0.03	3.17	0.07
Brazil	1.10	0.67	0.43	40.68	0.03	2.81	0.08
Canada	1.05	1.96	-0.90	26.32	0.01	1.27	0.04
Denmark	0.83	0.44	0.39	18.27	0.01	1.45	0.05
Australia	0.78	1.24	-0.46	28.78	0.00	0.42	0.06
Italy	0.68	0.43	0.26	24.51	0.01	1.56	0.06
Sweden	0.65	0.65	0.01	25.53	0.01	1.05	0.07
Russia	0.57	0.43	0.14	29.19	0.01	0.74	0.06
Spain	0.49	0.42	0.07	27.45	0.01	0.94	0.05
China	0.44	0.61	-0.17	31.39	0.00	0.29	0.04
South Africa	0.35	0.45	-0.10	35.32	-0.00	-0.09	0.07
Singapore	0.33	0.18	0.15	20.81	0.00	0.51	0.05
Finland	0.21	0.18	0.02	21.20	0.00	0.28	0.06
Norway	0.20	0.11	0.10	31.45	0.01	0.95	0.08
Thailand	0.19	0.21	-0.02	28.15	0.00	0.10	0.05
Indonesia	0.19	0.14	0.05	36.87	0.00	0.45	0.07
Belgium	0.18	0.16	0.02	25.54	0.00	0.29	0.05
Mexico	0.18	0.22	-0.04	33.59	0.00	0.06	0.07
Poland	0.17	0.09	0.08	32.16	0.01	0.70	0.09

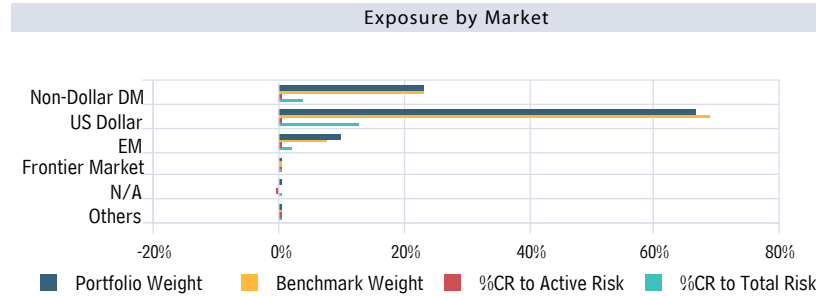


BarraOne Equity Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Public Equity
BENCHMARK: Public
POSITIONS: 6,025
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 9,025,011,400
ACCEPTED: 5,972

Portfolio Allocation by Currency



Developed Market Currency				Emerging Market Currency			
Top Five	Exposure \$	CR to AR (%)	CR to TR (%)	Top Five	Exposure \$	CR to AR (%)	CR to TR (%)
US Dollar	6,013,729,369.10	51.66	68.59	Korean Won	203,595,366.26	5.36	2.55
Euro	604,811,919.48	7.66	6.65	New Taiwan Dollar	193,355,057.04	3.31	1.79
Hong Kong Dollar	445,823,384.86	5.43	4.05	Indian Rupee	182,947,744.47	6.47	1.87
Japanese Yen	296,172,340.77	2.78	2.10	Brazilian Real	99,352,261.06	2.81	1.56
British Pound Sterling	246,283,003.70	6.98	3.14	Chinese Yuan	39,555,246.88	0.29	0.36

Top 15 Currencies by Weight%

Currency of Exposure	Weight (%)			Total Risk	CR to TR	CR to TR (%)	CR to AR	CR to AR (%)
	Portfolio	Benchmark	Active					
Total	100.00	100.00	-0.00	18.94	18.94	100.00	0.91	100.00
US Dollar	66.63	68.62	-1.98	19.80	12.99	68.59	0.47	51.66
Euro	6.70	5.73	0.97	20.90	1.26	6.65	0.07	7.66
Hong Kong Dollar	4.94	4.32	0.62	22.36	0.77	4.05	0.05	5.43
Japanese Yen	3.28	3.99	-0.71	16.69	0.40	2.10	0.03	2.78
British Pound Sterling	2.73	2.48	0.25	25.11	0.59	3.14	0.06	6.98
Korean Won	2.26	1.69	0.57	27.67	0.48	2.55	0.05	5.36
New Taiwan Dollar	2.14	1.78	0.36	24.63	0.34	1.79	0.03	3.31
Indian Rupee	2.03	1.26	0.76	27.05	0.35	1.87	0.06	6.47
Swiss Franc	1.87	1.69	0.18	15.35	0.23	1.23	0.02	1.84
Brazilian Real	1.10	0.67	0.43	40.68	0.30	1.56	0.03	2.81
Canadian Dollar	1.00	1.95	-0.96	26.03	0.23	1.20	0.01	0.81
Danish Krone	0.83	0.44	0.39	18.27	0.10	0.53	0.01	1.45
Australian Dollar	0.78	1.24	-0.46	28.78	0.19	1.00	0.00	0.41
Chinese Yuan	0.44	0.61	-0.17	31.39	0.07	0.36	0.00	0.29
Swedish Krona	0.40	0.65	-0.25	24.44	0.08	0.44	-0.01	-0.66

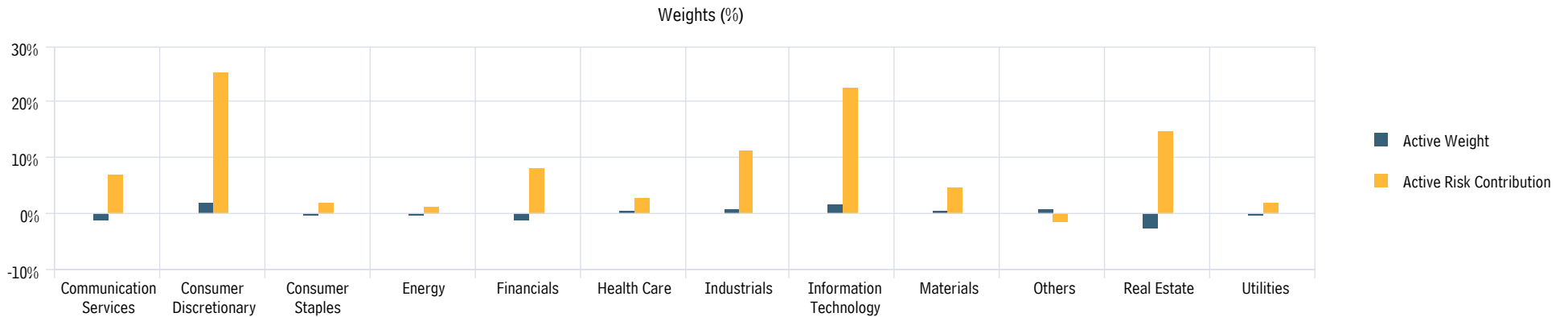
BarraOne Equity Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Public Equity
BENCHMARK: Public
POSITIONS: 6,025
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 9,025,011,400
ACCEPTED: 5,972

Portfolio Allocation by GICS Sector

GICS Sector	Weight (%)			Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active				
Total	100.00	100.00	-0.00	18.94	0.91	100.00	0.01
Communication Services	7.95	9.02	-1.07	19.93	0.06	7.00	0.04
Consumer Discretionary	14.67	12.63	2.05	23.27	0.23	25.42	0.06
Consumer Staples	5.70	6.11	-0.41	14.15	0.02	2.10	0.02
Energy	2.89	3.30	-0.41	33.67	0.01	1.32	0.06
Financials	12.43	13.55	-1.12	20.96	0.07	8.08	0.04
Health Care	12.06	11.79	0.27	15.78	0.03	2.83	0.03
Industrials	10.68	9.73	0.94	20.62	0.10	11.10	0.05
Information Technology	23.55	21.99	1.56	22.48	0.20	22.50	0.04
Materials	4.78	4.28	0.50	21.86	0.04	4.82	0.06
Others	0.80	0.00	0.80	0.64	-0.02	-1.73	0.00
Real Estate	2.40	5.13	-2.73	22.07	0.13	14.68	-0.01
Utilities	2.09	2.46	-0.37	19.50	0.02	1.87	0.01



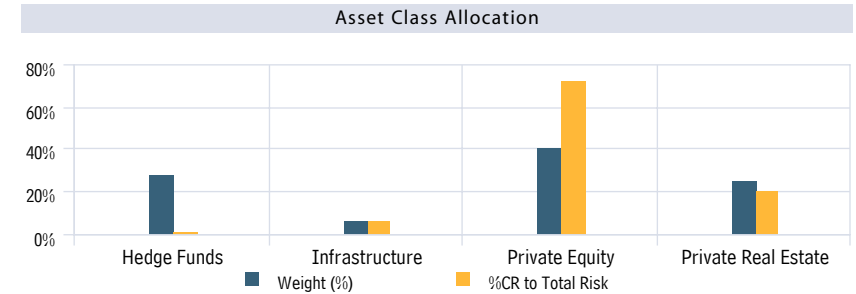
BarraOne Equity Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Alternative
BENCHMARK: Alternative
POSITIONS: 413
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 3,169,910,043
ACCEPTED: 411

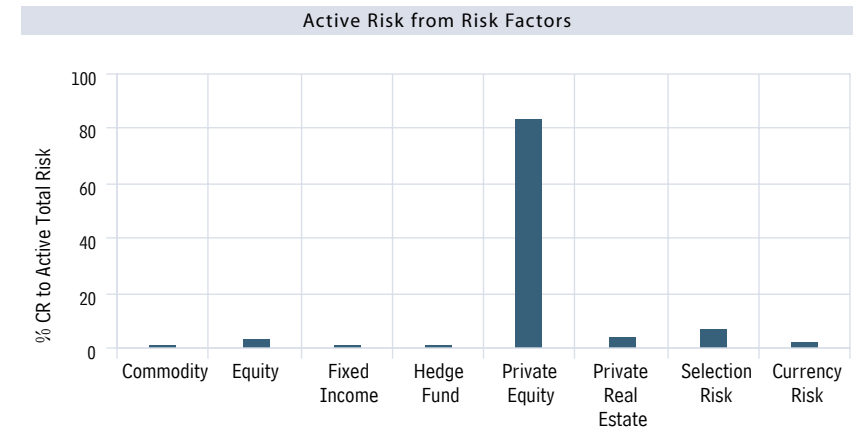
Total Plan Summary

Risk Summary		Asset Class Contribution to Risk					
Statistic	Value	Asset Class	Mkt Value	Weight (%)	Total Risk	Risk Contribution	%CR to TR
Total Risk	14.52	Total	3,169,910,043	100.00	14.52	14.52	100.00
Benchmark Risk	13.78	Hedge Funds	872,511,863	27.52	4.89	0.26	1.80
Active Risk	7.19	Infrastructure	193,947,912	6.12	16.11	0.87	5.98
Portfolio Beta	0.92	Private Equity	1,307,021,932	41.23	26.10	10.45	71.95
		Private Real Estate	796,428,336	25.12	15.37	2.94	20.27



Risk Factor Breakdown

Risk Decomposition						
Risk Source	Portfolio			Active		
	Risk Contribution	% Risk	Correlation	Risk Contribution	% Risk	Correlation
Total Risk	14.52	100.00	1.00	7.19	100.00	1.00
Local Market Risk	13.85	95.35	0.99	7.04	97.91	0.98
Common Factor Risk	13.72	94.48	0.99	6.56	91.20	0.95
Equity	8.26	56.89	0.86	0.24	3.31	0.19
Style	0.32	2.19	0.43	0.03	0.39	0.04
Industry	0.10	0.70	0.13	0.05	0.73	0.08
Market	7.84	54.01	0.86	0.16	2.19	0.16
Fixed Income	0.08	0.57	0.25	0.01	0.07	0.02
Spread	0.16	1.12	0.60	-0.00	-0.02	-0.00
Term Structure	-0.08	-0.55	-0.21	0.00	0.05	0.01
Hedge Fund	0.04	0.26	0.05	0.07	0.95	0.10
Private Real Estate	2.51	17.27	0.72	0.26	3.56	0.20
Commodity	-0.13	-0.90	-0.36	0.01	0.07	0.01
Private Equity	2.96	20.39	0.45	5.98	83.24	0.91
Selection Risk	0.13	0.87	0.09	0.48	6.71	0.26
Currency Risk	0.68	4.65	0.38	0.15	2.09	0.12



BarraOne Equity Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Alternative
BENCHMARK: Alternative
POSITIONS: 413
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 3,169,910,043
ACCEPTED: 411

Portfolio Allocation by Region

Region	Weight (%)			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
	Portfolio	Benchmark	Active				
Total	100.00	100.00	-0.00	14.52	7.19	100.00	0.07
Asia Pacific	2.36	0.00	2.36	15.60	0.04	0.59	0.02
EMEA	12.85	0.00	12.85	22.16	0.96	13.33	0.07
Latin-S America	0.26	0.00	0.26	49.36	0.06	0.77	0.21
N America	82.40	100.00	-17.60	14.69	6.07	84.40	0.03
N/A	2.02	0.00	2.02	13.39	0.06	0.79	0.03
Rest of World	0.10	0.00	0.10	29.87	0.01	0.14	0.10



BarraOne Equity Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Alternative
BENCHMARK: Alternative
POSITIONS: 413
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 3,169,910,043
ACCEPTED: 411

Top 30 Countries by Weight%

Country of Exposure	Weight (%)			Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active				
Total	100.00	100.00	-0.00	14.52	7.19	100.00	0.07
United States	81.36	99.99	-18.63	14.67	6.00	83.49	0.01
United Kingdom	3.93	0.00	3.93	26.58	0.30	4.20	0.06
Germany	2.08	0.00	2.07	17.77	0.13	1.85	0.04
Hong Kong	2.01	0.00	2.01	13.46	0.06	0.79	0.01
France	0.97	0.00	0.97	22.08	0.06	0.89	0.04
Italy	0.88	0.00	0.88	19.78	0.06	0.89	0.05
Spain	0.88	0.00	0.88	21.10	0.04	0.52	0.02
Canada	0.82	0.00	0.82	22.26	0.06	0.84	0.05
Switzerland	0.76	0.00	0.76	23.62	0.06	0.87	0.06
Sweden	0.73	0.00	0.73	27.81	0.06	0.80	0.06
Netherlands	0.71	0.00	0.71	24.53	0.06	0.87	0.07
Japan	0.61	0.00	0.61	14.19	0.01	0.18	0.00
China	0.54	0.00	0.54	19.45	0.01	0.13	-0.00
India	0.47	0.00	0.47	27.72	0.01	0.12	-0.00
Australia	0.37	0.00	0.37	22.67	0.00	0.07	-0.01
Denmark	0.32	0.00	0.32	32.28	0.03	0.48	0.08
Poland	0.30	0.00	0.30	33.47	0.03	0.38	0.07
Brazil	0.23	0.00	0.23	55.45	0.05	0.75	0.21
Israel	0.22	0.00	0.22	33.17	0.02	0.30	0.08
Belgium	0.21	0.00	0.21	25.75	0.02	0.25	0.07
Ireland	0.20	0.00	0.20	20.77	0.01	0.18	0.04
Norway	0.17	0.00	0.17	29.56	0.01	0.18	0.05
Singapore	0.13	0.00	0.13	25.53	0.00	0.03	-0.00
Finland	0.11	0.00	0.11	33.36	0.01	0.16	0.08
China International	0.09	0.00	0.09	38.33	0.00	0.01	-0.01
Greece	0.09	0.00	0.09	41.66	0.01	0.14	0.09
Portugal	0.09	0.00	0.09	18.66	0.01	0.09	0.05
S. Korea	0.09	0.00	0.09	19.18	0.00	0.03	0.00
Euro. Monetary Union	0.08	0.00	0.08	6.88	0.00	0.03	0.01
Austria	0.07	0.00	0.07	23.18	0.00	0.06	0.05

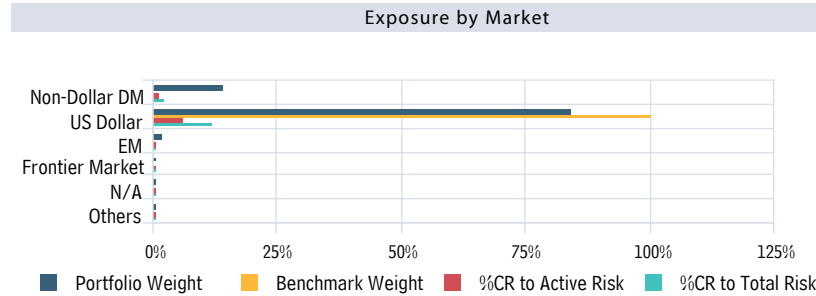


BarraOne Equity Summary

COMPANY: NYCRC - Fire Plan
PORTFOLIO: Alternative
BENCHMARK: Alternative
POSITIONS: 413
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 3,169,910,043
ACCEPTED: 411

Portfolio Allocation by Currency



Developed Market Currency				Emerging Market Currency			
Top Five	Exposure \$	CR to AR (%)	CR to TR (%)	Top Five	Exposure \$	CR to AR (%)	CR to TR (%)
US Dollar	2,660,019,759.42	84.44	81.55	Chinese Yuan	16,620,819.93	0.13	0.37
Euro	193,756,746.78	5.88	6.19	Indian Rupee	14,836,123.94	0.12	0.46
British Pound Sterling	122,629,525.52	4.18	5.32	Polish Zloty	9,630,611.43	0.38	0.38
Swiss Franc	24,063,570.14	0.87	0.80	Brazilian Real	7,369,024.72	0.75	0.58
Swedish Krona	23,189,299.71	0.80	1.02	Korean Won	2,805,837.49	0.03	0.07

Top 15 Currencies by Weight%

Currency of Exposure	Weight (%)			Total Risk	CR to TR	CR to TR (%)	CR to AR	CR to AR (%)
	Portfolio	Benchmark	Active					
Total	100.00	100.00	-0.00	14.52	14.52	100.00	7.19	100.00
US Dollar	83.91	100.00	-16.09	14.30	11.84	81.55	6.07	84.44
Euro	6.11	0.00	6.11	19.31	0.90	6.19	0.42	5.88
British Pound Sterling	3.87	0.00	3.87	27.02	0.77	5.32	0.30	4.18
Swiss Franc	0.76	0.00	0.76	23.68	0.12	0.80	0.06	0.87
Swedish Krona	0.73	0.00	0.73	27.81	0.15	1.02	0.06	0.80
Canadian Dollar	0.72	0.00	0.72	25.24	0.15	1.02	0.06	0.81
Japanese Yen	0.61	0.00	0.61	14.19	0.02	0.17	0.01	0.18
Chinese Yuan	0.52	0.00	0.52	20.13	0.05	0.37	0.01	0.13
Indian Rupee	0.47	0.00	0.47	27.72	0.07	0.46	0.01	0.12
Australian Dollar	0.37	0.00	0.37	22.67	0.06	0.39	0.00	0.07
Danish Krone	0.32	0.00	0.32	32.28	0.06	0.43	0.03	0.48
Polish Zloty	0.30	0.00	0.30	33.47	0.06	0.38	0.03	0.38
Brazilian Real	0.23	0.00	0.23	55.45	0.08	0.58	0.05	0.75
New Israeli Sheqel	0.22	0.00	0.22	33.17	0.05	0.33	0.02	0.30
Norwegian Krone	0.15	0.00	0.15	33.66	0.04	0.25	0.01	0.18

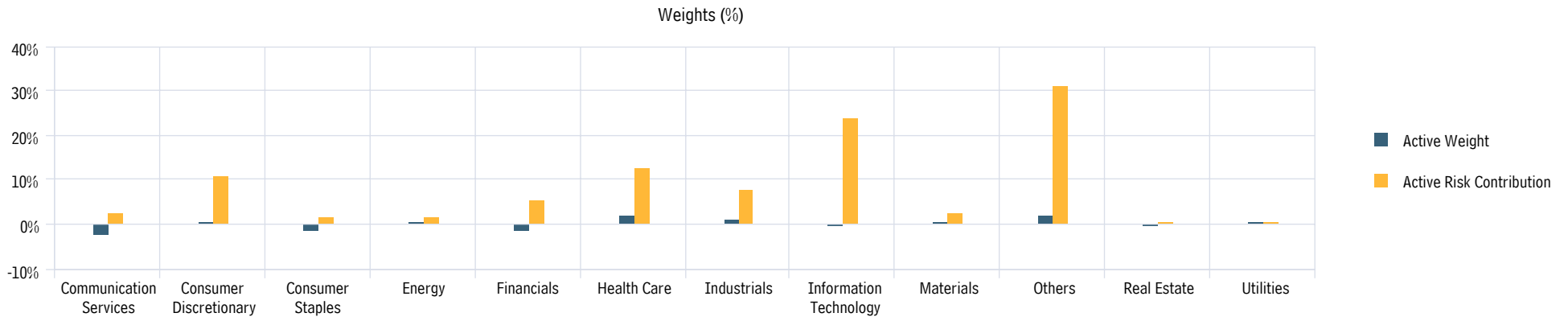
BarraOne Equity Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Alternative
BENCHMARK: Alternative
POSITIONS: 413
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 3,169,910,043
ACCEPTED: 411

Portfolio Allocation by GICS Sector

GICS Sector	Weight (%)			Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active				
Total	100.00	100.00	-0.00	14.52	7.19	100.00	0.07
Communication Services	1.97	4.17	-2.20	24.83	0.16	2.22	-0.00
Consumer Discretionary	5.33	5.04	0.29	28.80	0.76	10.60	0.04
Consumer Staples	0.89	2.19	-1.30	25.92	0.11	1.52	0.02
Energy	1.27	1.15	0.12	26.93	0.12	1.69	0.04
Financials	3.13	4.78	-1.64	25.60	0.39	5.49	0.03
Health Care	7.57	5.62	1.95	25.38	0.90	12.58	0.05
Industrials	4.87	3.90	0.97	24.34	0.56	7.74	0.04
Information Technology	10.26	10.96	-0.71	29.10	1.72	23.92	0.05
Materials	1.39	1.02	0.37	23.24	0.16	2.29	0.05
Others	60.86	58.82	2.04	9.47	2.22	30.88	-0.00
Real Estate	0.96	1.38	-0.42	26.43	0.04	0.49	-0.01
Utilities	1.50	0.97	0.53	6.98	0.04	0.57	-0.00



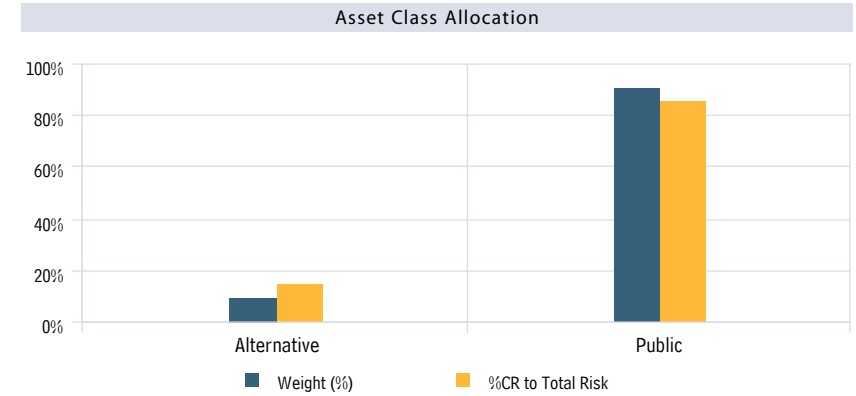
BarraOne Fixed Income Summary

Total Plan Summary

Risk Summary		Asset Class Contribution to Risk					
Statistic	Value	Asset Class	Mkt Value	Weight (%)	Total Risk	Risk Contribution	%CR to TR
Total Risk	4.28	Total	6,646,519,608	100.00	4.28	4.28	100.00
Benchmark Risk	4.30	Alternative	594,377,905	8.94	12.93	0.61	14.35
Active Risk	1.05	Public	6,052,141,704	91.06	4.17	3.67	85.65
Portfolio Beta	0.96						
Cont. to Eff. Duration	8.04						
Convexity	1.45						
Yield to Worst (%)	3.39						
OAS to Swap (bp)	105.73						

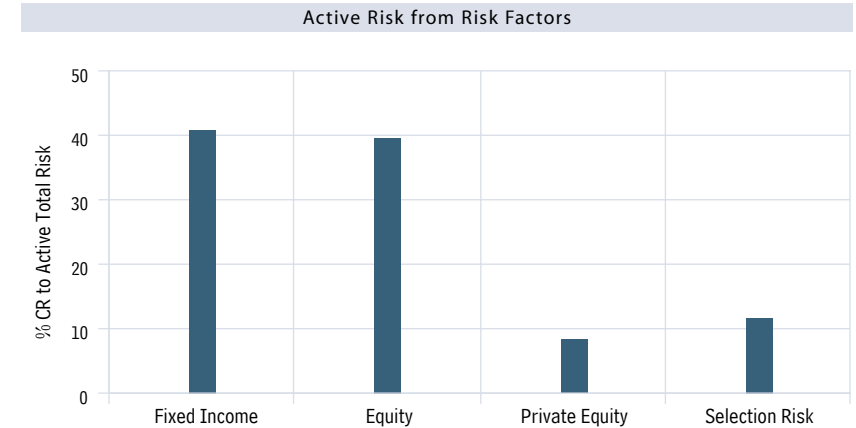
COMPANY: NYCRS - Fire Plan
PORTFOLIO: FIXED INCOME
BENCHMARK: Fixed Income
POSITIONS: 8,148
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 6,646,519,608
ACCEPTED: 8,048



Risk Factor Breakdown

Risk Decomposition						
Risk Source	Portfolio			Active		
	Risk Contribution	% Risk	Correlation	Risk Contribution	% Risk	Correlation
Total Risk	4.28	100.00	1.00	1.05	100.00	1.00
Local Market Risk	4.24	99.12	1.00	1.06	100.14	0.99
Common Factor Risk	4.22	98.51	1.00	0.93	88.53	0.93
Equity	0.16	3.73	0.24	0.42	39.61	0.68
Style	0.03	0.59	0.09	0.20	18.62	0.57
Industry	0.00	0.02	0.01	0.04	4.20	0.29
Market	0.13	3.13	0.27	0.18	16.84	0.60
Fixed Income	4.03	94.24	0.98	0.43	40.98	0.70
Implied Volatility	0.04	0.88	0.40	0.00	0.03	0.21
Inflation	0.07	1.62	0.11	-0.05	-4.75	-0.50
Spread	0.47	11.10	0.20	0.17	16.56	0.55
Term Structure	3.45	80.71	0.71	0.31	29.10	0.62
Private Equity	0.02	0.49	0.07	0.09	8.13	0.29
Selection Risk	0.03	0.61	0.08	0.12	11.60	0.34
Currency Risk	0.04	0.88	0.27	-0.00	-0.14	-0.01



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BarraOne Fixed Income Summary

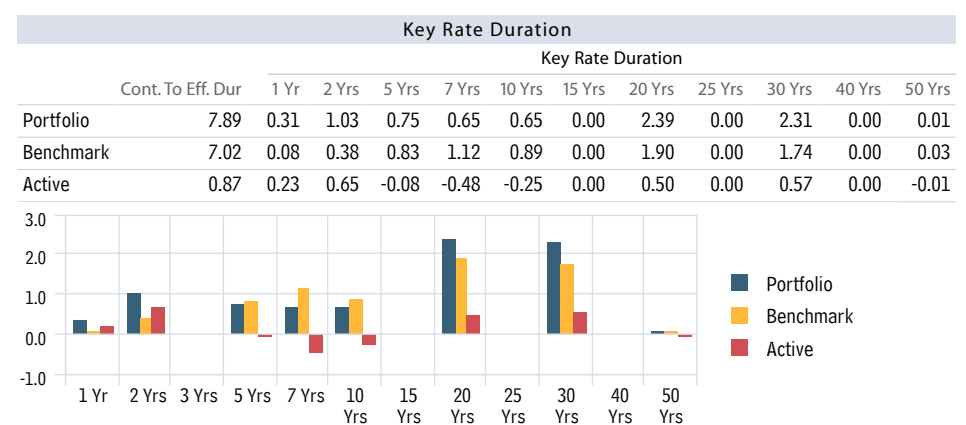
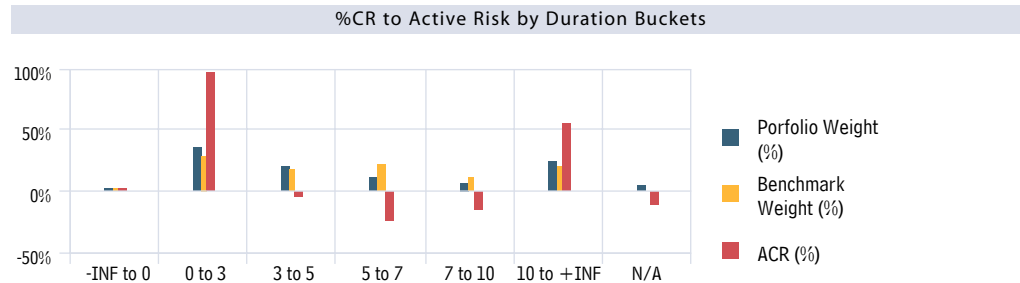
COMPANY: NYCERS - Fire Plan
PORTFOLIO: FIXED INCOME
BENCHMARK: Fixed Income
POSITIONS: 8,148
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 6,646,519,608
ACCEPTED: 8,048

Portfolio by Factor Breakdowns

Top 10 Spread Factor									
Spread Factor	Volatility	Exposure (Residual)				Correlation	Contribution (Residual)		
		Portfolio	Benchmark	Active	MCAR		to TR	to AR	to AR%
US Bank Loan Consumer Discreti	24.55	0.36	0.89	-0.53	-0.15	-0.62	0.02	0.08	7.66
US Information Technology HY S	46.05	0.07	0.27	-0.20	-0.28	-0.61	0.01	0.06	5.26
US Bank Loan Industrials Sprea	23.57	0.14	0.41	-0.27	-0.14	-0.61	0.01	0.04	3.72
US Bank Loan Financials Spread	25.92	0.10	0.32	-0.22	-0.16	-0.60	0.01	0.03	3.30
US Bank Loan Telecommunication	25.49	0.05	0.19	-0.14	-0.15	-0.59	0.00	0.02	2.03
US Bank Loan Health Care Sprea	21.69	0.12	0.28	-0.16	-0.13	-0.60	0.00	0.02	2.02
US Bank Loan Materials Spread	23.97	0.04	0.16	-0.11	-0.14	-0.60	0.00	0.02	1.57
US MBS Conventional 30Y Spread	0.42	0.37	0.47	-0.09	-0.00	-0.41	0.02	0.02	1.54
US Consumer Staples HY Spread	41.50	0.14	0.20	-0.06	-0.23	-0.55	0.01	0.01	1.31
EM CN Spread	31.08	0.00	0.09	-0.09	-0.15	-0.47	0.00	0.01	1.24

Top 10 Term Structure									
Term Structure	Volatility	Exposure (Residual)				Correlation	Contribution (Residual)		
		Portfolio	Benchmark	Active	MCAR		to TR	to AR	to AR%
USD Rate 2Y	0.55	1.00	0.38	0.62	0.00	0.56	0.21	0.19	17.90
USD Rate 30Y	0.69	2.22	1.74	0.49	0.00	0.44	1.14	0.15	14.09
USD Rate 20Y	0.70	2.30	1.89	0.41	0.00	0.46	1.15	0.13	12.62
USD Rate 1Y	0.57	0.30	0.08	0.22	0.00	0.56	0.03	0.07	6.66
USD Rate 6M	0.65	0.08	0.03	0.05	0.00	0.53	0.00	0.02	1.60
EUR Rate 5Y	0.38	0.02	0.00	0.02	0.00	0.26	0.00	0.00	0.16
EUR Rate 20Y	0.53	0.01	0.00	0.01	0.00	0.27	0.00	0.00	0.13
EUR Rate 30Y	0.53	0.01	0.00	0.01	0.00	0.27	0.00	0.00	0.07
GBP Rate 5Y	0.47	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.06
EUR Rate 2Y	0.28	0.01	0.00	0.01	0.00	0.26	0.00	0.00	0.05



BarraOne Fixed Income Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: FIXED INCOME
BENCHMARK: Fixed Income
POSITIONS: 8,148
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 6,646,519,608
ACCEPTED: 8,048

Top 30 Countries by Weight%

Country of Exposure	Weight (%)			Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active				
Total	100.00	100.00	0.00	4.28	1.05	100.00	0.01
United States	91.99	92.66	-0.67	4.39	1.13	107.06	-0.00
United Kingdom	1.37	1.05	0.32	7.79	-0.02	-1.76	-0.02
Canada	1.27	1.47	-0.20	4.80	0.00	0.44	-0.02
N/A	1.19	0.00	1.19	18.44	-0.11	-10.24	-0.10
Germany	0.51	0.19	0.32	16.11	-0.02	-1.88	-0.04
Luxembourg	0.39	0.56	-0.17	8.87	0.00	0.14	-0.03
France	0.35	0.22	0.12	24.56	-0.02	-1.79	-0.07
Netherlands	0.32	0.50	-0.18	4.46	-0.00	-0.14	-0.01
Jersey	0.30	0.03	0.28	0.07	0.01	0.48	-0.01
Ireland	0.29	0.27	0.02	5.54	0.00	0.21	-0.01
Caymans	0.25	0.09	0.16	4.70	-0.00	-0.04	-0.02
Euro. Monetary Union	0.20	0.00	0.20	6.80	-0.00	-0.10	-0.00
Switzerland	0.18	0.14	0.04	7.18	0.00	0.15	0.00
Spain	0.17	0.07	0.10	4.60	0.00	0.09	0.00
Belgium	0.12	0.14	-0.02	18.50	0.00	0.00	0.01
Mexico	0.11	0.06	0.05	13.17	-0.00	-0.28	-0.04
Italy	0.11	0.21	-0.10	11.90	0.00	0.34	-0.01
Japan	0.09	0.28	-0.19	4.40	-0.00	-0.29	0.01
Israel	0.09	0.10	-0.01	7.60	0.01	1.39	-0.11
Australia	0.09	0.17	-0.08	4.16	-0.00	-0.01	-0.00
Greece	0.07	0.00	0.07	16.67	-0.00	-0.13	-0.03
Brazil	0.06	0.05	0.01	15.96	-0.00	-0.27	-0.04
Bermuda	0.05	0.11	-0.06	14.40	0.00	0.09	-0.05
Macao	0.05	0.11	-0.06	6.37	0.00	0.05	-0.02
Austria	0.05	0.01	0.03	29.74	-0.00	-0.45	-0.11
Chile	0.04	0.01	0.03	4.68	-0.00	-0.01	-0.01
United Arab Emirates	0.04	0.00	0.04	10.76	-0.00	-0.11	-0.04
S. Korea	0.03	0.01	0.03	3.21	0.00	0.03	0.01
Denmark	0.03	0.01	0.02	34.78	-0.00	-0.16	-0.05
China	0.03	0.40	-0.37	6.70	0.04	3.79	-0.10

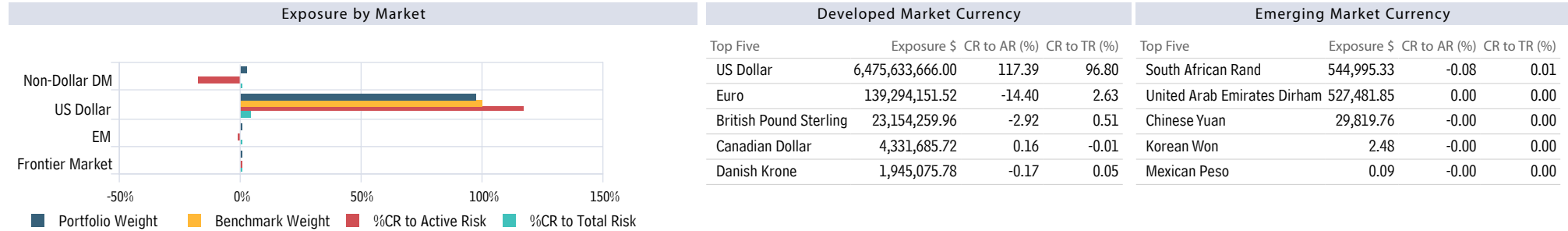


BarraOne Fixed Income Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: FIXED INCOME
BENCHMARK: Fixed Income
POSITIONS: 8,148
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 6,646,519,608
ACCEPTED: 8,048

Portfolio Allocation by Currency



Top 15 Currencies by Weight%								
Currency of Exposure	Weight (%)			Total Risk	CR to TR	CR to TR (%)	CR to AR	CR to AR (%)
	Portfolio	Benchmark	Active					
Total	100.00	100.00	0.00	4.28	4.28	100.00	1.05	100.00
US Dollar	97.43	100.00	-2.57	4.27	4.14	96.80	1.24	117.39
Euro	2.10	0.00	2.10	16.88	0.11	2.63	-0.15	-14.40
British Pound Sterling	0.35	0.00	0.35	25.79	0.02	0.51	-0.03	-2.92
Canadian Dollar	0.07	0.00	0.07	23.65	-0.00	-0.01	0.00	0.16
Danish Krone	0.03	0.00	0.03	34.78	0.00	0.05	-0.00	-0.17
South African Rand	0.01	0.00	0.01	80.93	0.00	0.01	-0.00	-0.08
United Arab Emirates Dirham	0.01	0.00	0.01	0.04	0.00	0.00	0.00	0.00
Swedish Krona	0.01	0.00	0.01	10.26	0.00	0.00	0.00	0.02
Japanese Yen	0.01	0.00	0.01	16.02	0.00	0.01	0.00	0.01
Australian Dollar	0.00	0.00	0.00	10.42	0.00	0.00	-0.00	-0.00
Norwegian Krone	0.00	0.00	0.00	70.31	0.00	0.00	-0.00	-0.01
Chinese Yuan	0.00	0.00	0.00	14.94	0.00	0.00	-0.00	-0.00
Singapore Dollar	0.00	0.00	0.00	4.47	0.00	0.00	0.00	0.00
Korean Won	0.00	0.00	0.00	6.84	0.00	0.00	-0.00	-0.00
Mexican Peso	0.00	0.00	0.00	15.11	0.00	0.00	-0.00	-0.00

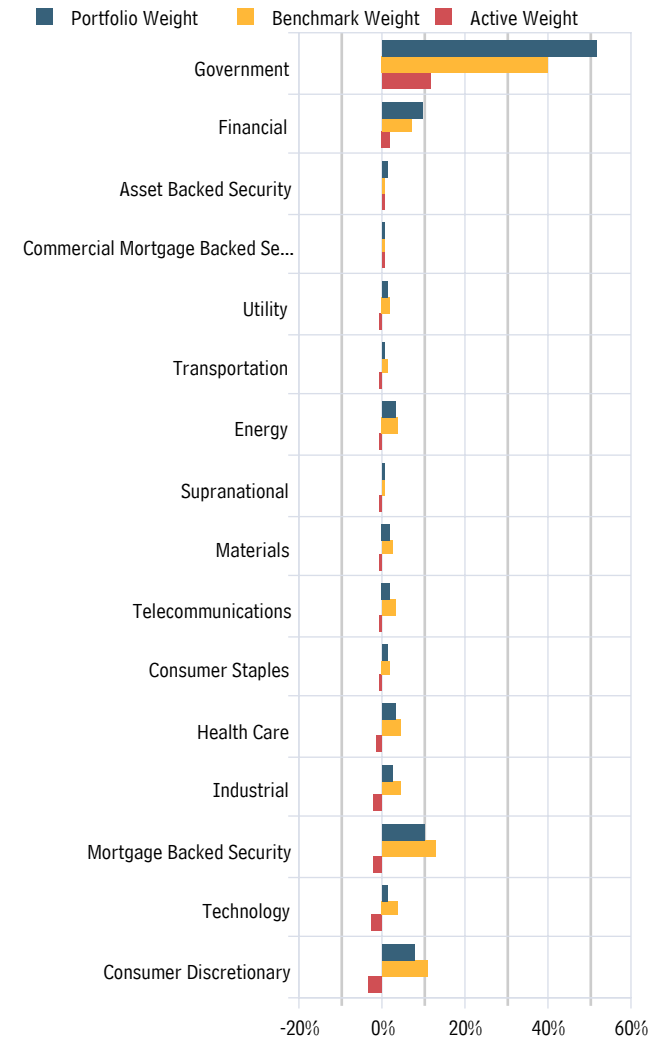
BarraOne Fixed Income Summary

COMPANY: NYCRC - Fire Plan
PORTFOLIO: FIXED INCOME
BENCHMARK: Fixed Income
POSITIONS: 8,148
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 6,646,519,608
ACCEPTED: 8,048

Portfolio Allocation by Bond Sector

Sector	Weight (%)			Cont. To Eff. Dur	Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active					
Total	100.00	100.00	0.00	7.89	4.28	1.05	100.00	0.01
Government	51.65	39.95	11.70	4.94	5.74	0.22	21.06	0.02
Mortgage Backed Security	10.64	12.62	-1.98	0.44	2.81	-0.02	-2.13	0.00
Financial	9.56	7.34	2.22	0.33	3.85	0.07	6.38	-0.01
Consumer Discretionary	7.72	11.11	-3.38	0.31	7.87	0.37	34.67	-0.06
Energy	3.46	3.82	-0.36	0.18	7.23	0.02	1.79	-0.03
Health Care	3.35	4.55	-1.20	0.20	5.09	0.08	7.75	-0.03
Industrial	2.61	4.54	-1.93	0.09	4.86	0.04	3.88	-0.03
Telecommunications	2.08	2.98	-0.90	0.13	5.82	0.02	1.80	-0.02
Materials	1.66	2.50	-0.83	0.07	5.52	0.02	1.55	-0.03
Utility	1.51	1.80	-0.29	0.12	7.68	-0.00	-0.23	-0.01
Technology	1.35	4.03	-2.68	0.10	5.42	0.30	28.42	-0.09
Consumer Staples	1.05	1.98	-0.93	0.08	6.65	0.01	0.53	-0.01
Asset Backed Security	1.05	0.09	0.95	0.02	2.98	-0.00	-0.25	-0.01
Transportation	0.92	1.23	-0.30	0.04	4.60	0.04	3.60	-0.04
Commercial Mortgage Backed	0.92	0.07	0.86	0.02	1.98	0.00	0.33	-0.00
Agency	0.29	0.67	-0.38	0.02	5.20	-0.01	-1.23	0.01
Collateralized Loan Obligat	0.16	0.00	0.16	0.76	239.08	0.20	18.76	1.23
Local/Provincial	0.09	0.09	0.00	0.00	7.20	-0.00	-0.01	-0.02
Sovereign	0.07	0.07	0.01	0.01	8.62	-0.00	-0.01	-0.02
Collateralized Debt Obligat	0.01	0.00	0.01	0.00	4.73	0.00	0.02	0.02
Supranational	0.00	0.56	-0.56	0.00	1.27	-0.01	-1.20	0.02
Others	-0.17	0.00	-0.17	0.04	447.01	-0.27	-25.50	-0.02



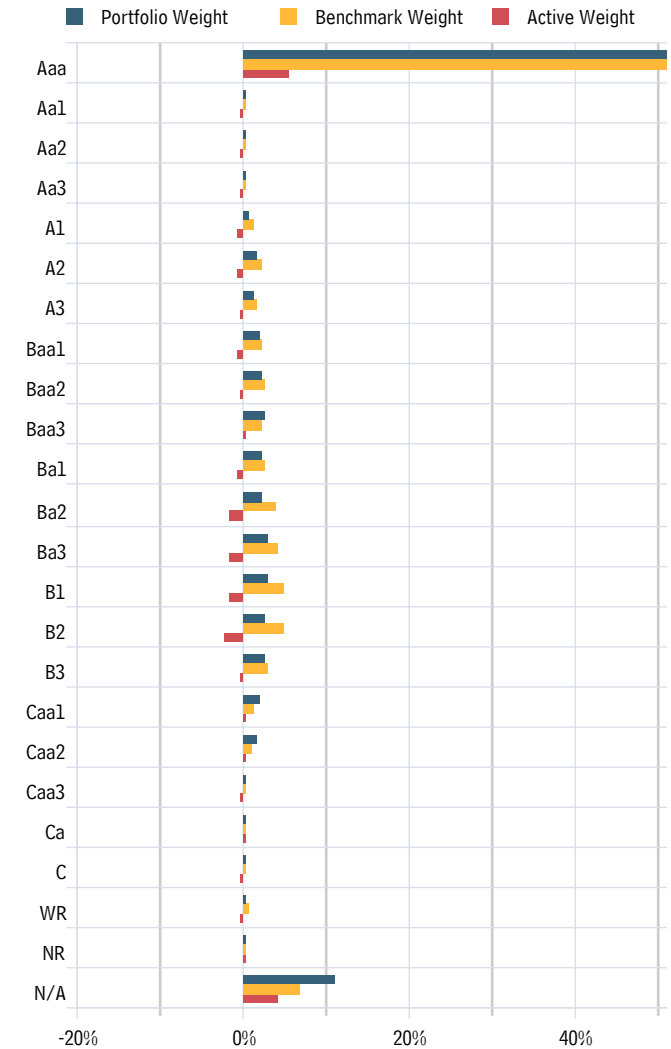
BarraOne Fixed Income Summary

COMPANY: NYCRC - Fire Plan
PORTFOLIO: FIXED INCOME
BENCHMARK: Fixed Income
POSITIONS: 8,148
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 6,646,519,608
ACCEPTED: 8,048

Portfolio Allocation by Moody's Rating

Rating	Weight (%)			Cont. To Eff. Dur	Spread Duration	Total Risk	Active Risk CR	%CR to Active TR
	Portfolio	Benchmark	Active					
Total	100.00	100.00	0.00	7.89	7.59	4.28	1.05	100.00
Aaa	58.59	53.22	5.37	5.21	8.87	5.23	0.13	12.31
Aa1	0.12	0.20	-0.09	0.02	12.80	9.04	-0.00	-0.14
Aa2	0.15	0.45	-0.29	0.02	10.82	6.82	-0.01	-0.50
Aa3	0.13	0.38	-0.25	0.02	12.30	8.08	-0.00	-0.43
A1	0.59	1.26	-0.67	0.06	9.44	5.84	-0.01	-1.26
A2	1.57	2.12	-0.55	0.14	8.56	5.44	-0.01	-1.07
A3	1.30	1.61	-0.30	0.12	8.97	5.58	-0.00	-0.44
Baa1	1.81	2.32	-0.51	0.16	8.61	5.56	0.00	0.06
Baa2	2.42	2.54	-0.13	0.21	8.41	5.57	-0.00	-0.09
Baa3	2.58	2.26	0.32	0.19	7.15	5.23	0.01	1.02
Ba1	2.11	2.69	-0.58	0.12	5.80	13.99	-0.00	-0.38
Ba2	2.32	3.93	-1.62	0.11	4.60	5.92	0.03	3.11
Ba3	2.86	4.33	-1.47	0.10	3.70	5.11	0.02	2.26
B1	2.98	4.70	-1.72	0.11	3.62	5.36	0.06	5.63
B2	2.65	4.93	-2.28	0.09	3.31	7.50	0.07	6.75
B3	2.48	2.77	-0.28	0.06	2.70	6.61	0.01	0.99
Caa1	1.85	1.38	0.47	0.04	2.42	6.75	-0.01	-0.85
Caa2	1.54	1.10	0.44	0.05	3.01	8.36	-0.02	-1.52
Caa3	0.19	0.25	-0.06	0.00	2.16	9.70	0.00	0.38
Ca	0.13	0.06	0.07	0.00	1.56	15.30	-0.00	-0.40
C	0.01	0.01	-0.00	0.00	7.42	17.66	0.00	0.06
WR	0.41	0.56	-0.15	0.01	1.79	5.17	0.00	0.30
NR	0.14	0.02	0.12	0.75	127.67	277.30	0.20	19.18
Not Rated	11.09	6.92	4.16	0.32	4.64	8.81	0.58	55.02



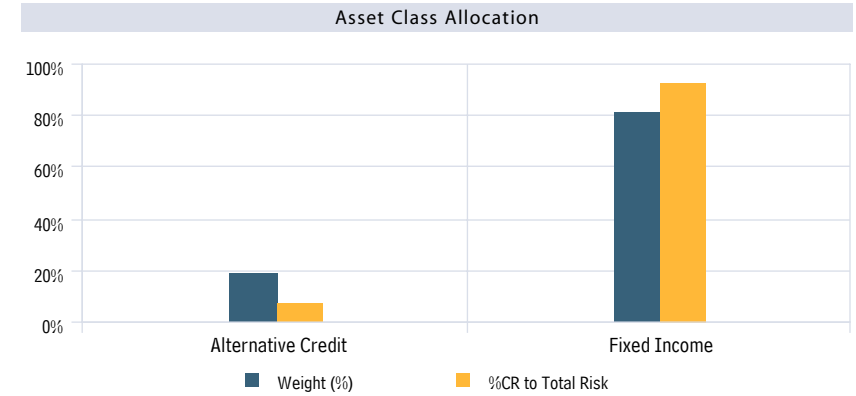
BarraOne Fixed Income Summary

Total Plan Summary

Risk Summary		Asset Class Contribution to Risk					
Statistic	Value	Asset Class	Mkt Value	Weight (%)	Total Risk	Risk Contribution	%CR to TR
Total Risk	4.17	Total	6,052,141,704	100.00	4.17	4.17	100.00
Benchmark Risk	4.30	Alternative Credit	1,103,296,407	18.23	5.88	0.29	6.98
Active Risk	1.77	Fixed Income	4,948,845,297	81.77	4.90	3.88	93.02
Portfolio Beta	0.88						
Cont. to Eff. Duration	7.66						
Convexity	0.93						
Yield to Worst (%)	2.16						
OAS to Swap (bp)	64.67						

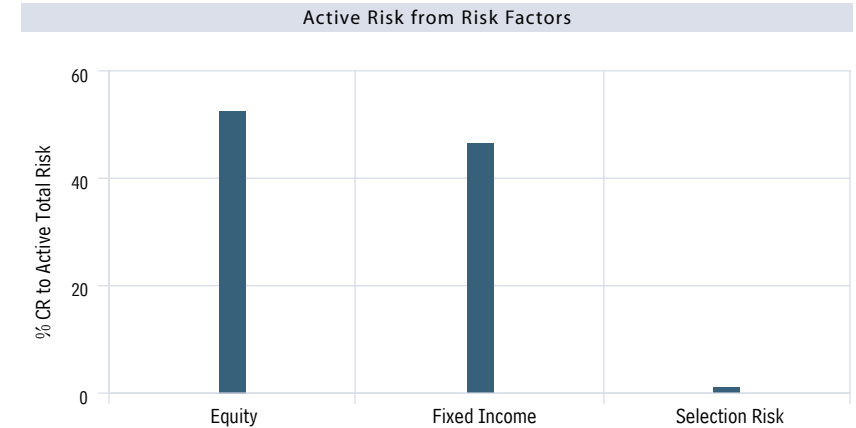
COMPANY: NYCRS - Fire Plan
PORTFOLIO: Public
BENCHMARK: Fixed Income
POSITIONS: 8,120
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 6,052,141,704
ACCEPTED: 8,020



Risk Factor Breakdown

Risk Decomposition						
Risk Source	Portfolio			Active		
	Risk Contribution	% Risk	Correlation	Risk Contribution	% Risk	Correlation
Total Risk	4.17	100.00	1.00	1.77	100.00	1.00
Local Market Risk	4.17	100.00	1.00	1.77	99.98	1.00
Common Factor Risk	4.16	99.91	1.00	1.75	98.96	0.99
Equity	0.01	0.30	0.15	0.92	52.28	0.89
Style	-0.00	-0.04	-0.08	0.32	18.09	0.74
Industry	0.01	0.15	0.20	0.03	1.92	0.25
Market	0.01	0.19	0.10	0.57	32.27	0.86
Fixed Income	4.15	99.61	1.00	0.83	46.68	0.86
Implied Volatility	0.03	0.78	0.35	0.00	0.01	0.31
Inflation	-0.04	-0.98	-0.06	-0.11	-6.50	-0.70
Spread	-0.03	-0.65	-0.01	0.67	37.91	0.86
Term Structure	4.19	100.53	0.86	0.27	15.25	0.55
Selection Risk	0.00	0.09	0.03	0.02	1.02	0.10



BarraOne Fixed Income Summary

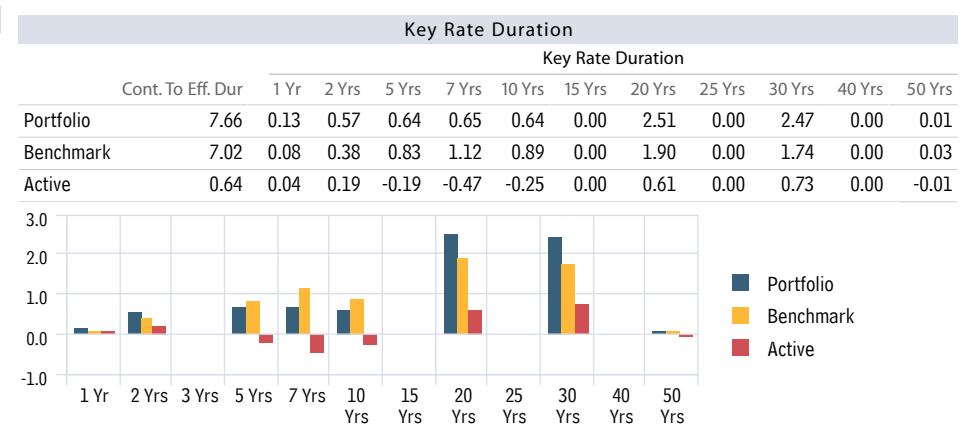
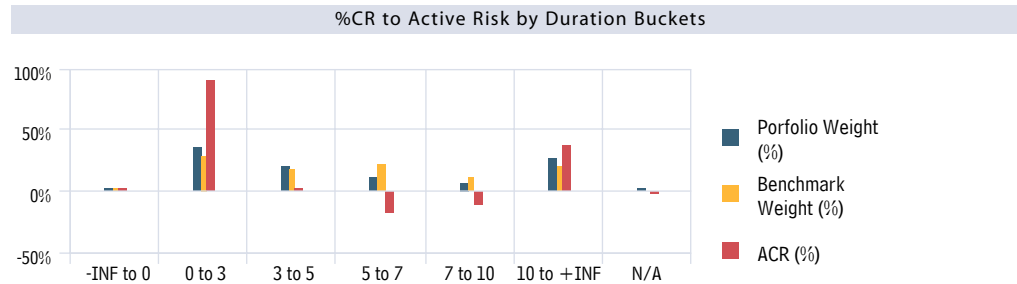
COMPANY: NYCRC - Fire Plan
PORTFOLIO: Public
BENCHMARK: Fixed Income
POSITIONS: 8,120
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 6,052,141,704
ACCEPTED: 8,020

Portfolio by Factor Breakdowns

Top 10 Spread Factor									
Spread Factor	Volatility	Exposure (Residual)				Correlation	Contribution (Residual)		
		Portfolio	Benchmark	Active	MCAR		to TR	to AR	to AR%
US Bank Loan Consumer Discreti	24.55	0.15	0.89	-0.75	-0.19	-0.79	0.00	0.14	8.16
US Information Technology HY S	46.05	0.07	0.27	-0.21	-0.38	-0.82	-0.00	0.08	4.40
US Bank Loan Industrials Sprea	23.57	0.05	0.41	-0.36	-0.18	-0.78	0.00	0.07	3.73
US Bank Loan Financials Spread	25.92	0.04	0.32	-0.28	-0.20	-0.77	0.00	0.06	3.13
US Bank Loan Health Care Sprea	21.69	0.06	0.28	-0.22	-0.17	-0.77	0.00	0.04	2.11
US Bank Loan Telecommunication	25.49	0.01	0.19	-0.18	-0.19	-0.75	0.00	0.03	1.89
US Consumer Discretionary HY S	47.38	0.80	0.88	-0.08	-0.39	-0.83	-0.01	0.03	1.84
US Industrials HY Spread	44.59	0.18	0.26	-0.08	-0.37	-0.82	-0.00	0.03	1.67
US Bank Loan Materials Spread	23.97	0.01	0.16	-0.14	-0.19	-0.78	0.00	0.03	1.52
US Consumer Staples HY Spread	41.50	0.12	0.20	-0.08	-0.32	-0.77	-0.00	0.03	1.44

Top 10 Term Structure									
Term Structure	Volatility	Exposure (Residual)				Correlation	Contribution (Residual)		
		Portfolio	Benchmark	Active	MCAR		to TR	to AR	to AR%
USD Rate 30Y	0.69	2.46	1.74	0.73	0.00	0.52	1.48	0.26	14.89
USD Rate 20Y	0.70	2.50	1.89	0.61	0.00	0.55	1.49	0.24	13.42
USD Rate 2Y	0.55	0.57	0.38	0.19	0.00	0.55	0.15	0.06	3.23
USD Rate 1Y	0.57	0.13	0.08	0.04	0.00	0.55	0.02	0.01	0.76
USD Rate 6M	0.65	0.04	0.03	0.01	0.00	0.53	0.00	0.00	0.14
USD Muni 5Y	1.17	0.00	0.00	-0.00	-0.00	-0.21	0.00	0.00	0.00
USD Muni 2Y	1.05	0.00	0.00	-0.00	-0.00	-0.24	0.00	0.00	0.00
USD Muni 30Y	1.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
USD Muni 1Y	0.91	0.00	0.00	-0.00	-0.00	-0.24	0.00	0.00	0.00
USD Muni 6M	0.79	0.00	0.00	-0.00	-0.00	-0.17	0.00	0.00	0.00



BarraOne Fixed Income Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Public
BENCHMARK: Fixed Income
POSITIONS: 8,120
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 6,052,141,704
ACCEPTED: 8,020

Top 30 Countries by Weight%

Country of Exposure	Weight (%)			Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active				
Total	100.00	100.00	0.00	4.17	1.77	100.00	0.02
United States	94.56	92.66	1.90	4.29	1.61	90.98	-0.01
Canada	1.12	1.47	-0.35	4.29	0.01	0.37	-0.02
United Kingdom	1.10	1.05	0.05	3.72	0.02	0.86	-0.01
Jersey	0.33	0.03	0.31	0.00	0.01	0.42	-0.01
Luxembourg	0.32	0.56	-0.24	5.67	0.01	0.57	-0.04
Netherlands	0.31	0.50	-0.19	3.85	0.00	0.01	-0.01
Ireland	0.30	0.27	0.03	5.33	0.00	0.13	-0.02
Caymans	0.24	0.09	0.15	0.60	0.01	0.35	-0.02
France	0.22	0.22	-0.00	4.25	0.00	0.08	-0.01
Spain	0.18	0.07	0.12	4.58	0.00	0.08	-0.00
Switzerland	0.16	0.14	0.02	7.58	0.00	0.14	-0.00
Germany	0.14	0.19	-0.05	4.39	0.00	0.06	-0.02
Belgium	0.13	0.14	-0.01	18.50	0.00	0.00	-0.00
Mexico	0.12	0.06	0.06	13.17	-0.00	-0.27	-0.06
Australia	0.09	0.17	-0.08	4.21	-0.00	-0.01	-0.01
Japan	0.09	0.28	-0.19	4.43	-0.00	-0.23	0.01
Israel	0.09	0.10	-0.01	7.08	0.02	1.01	-0.14
Macao	0.06	0.11	-0.05	6.37	0.00	0.04	-0.03
Italy	0.05	0.21	-0.16	11.42	0.01	0.29	-0.04
Chile	0.05	0.01	0.04	4.68	-0.00	-0.01	-0.02
Brazil	0.04	0.05	-0.01	8.98	-0.00	-0.02	-0.03
S. Korea	0.03	0.01	0.03	3.21	0.00	0.03	0.01
China	0.03	0.40	-0.37	6.82	0.05	2.92	-0.14
Zambia	0.03	0.00	0.03	4.36	-0.00	-0.02	-0.02
Colombia	0.03	0.01	0.02	6.55	-0.00	-0.00	-0.04
India	0.03	0.01	0.02	6.60	-0.00	-0.02	-0.02
United Arab Emirates	0.03	0.00	0.03	14.45	-0.00	-0.10	-0.08
Bermuda	0.02	0.11	-0.08	14.94	0.00	0.22	-0.07
Indonesia	0.02	0.00	0.01	11.48	-0.00	-0.02	-0.04
Virgin Island, British	0.02	0.03	-0.01	2.96	-0.00	-0.01	-0.01

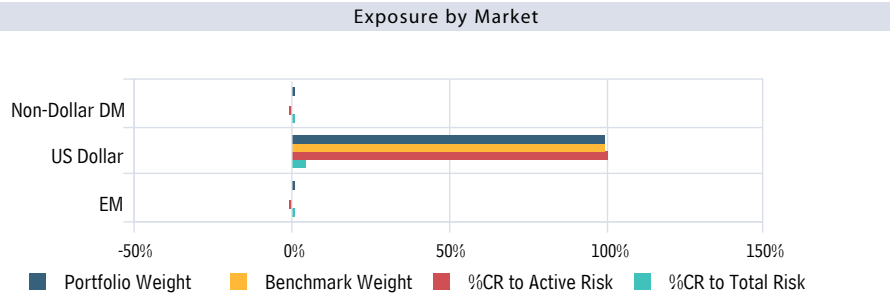


BarraOne Fixed Income Summary

COMPANY: NYCERS - Fire Plan
PORTFOLIO: Public
BENCHMARK: Fixed Income
POSITIONS: 8,120
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 6,052,141,704
ACCEPTED: 8,020

Portfolio Allocation by Currency



Developed Market Currency			
Top Five	Exposure \$	CR to AR (%)	CR to TR (%)
US Dollar	6,052,060,780.53	100.02	100.00
Canadian Dollar	78,253.29	-0.02	0.00
Euro	2,667.48	0.00	0.00

Emerging Market Currency			
Top Five	Exposure \$	CR to AR (%)	CR to TR (%)
Korean Won	2.48	-0.00	0.00

Top 15 Currencies by Weight%								
Currency of Exposure	Weight (%)			Total Risk	CR to TR	CR to TR (%)	CR to AR	CR to AR (%)
	Portfolio	Benchmark	Active					
Total	100.00	100.00	0.00	4.17	4.17	100.00	1.77	100.00
US Dollar	100.00	100.00	-0.00	4.17	4.17	100.00	1.77	100.02
Canadian Dollar	0.00	0.00	0.00	64.43	0.00	0.00	-0.00	-0.02
Euro	0.00	0.00	0.00	6.88	0.00	0.00	0.00	0.00
Korean Won	0.00	0.00	0.00	6.84	0.00	0.00	-0.00	-0.00

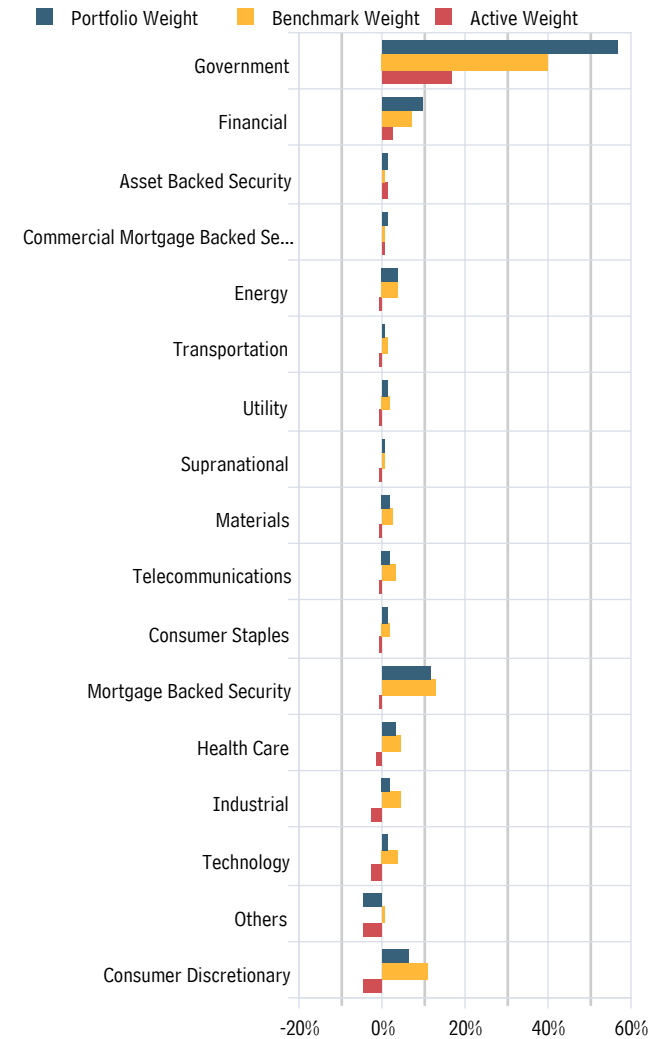
BarraOne Fixed Income Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Public
BENCHMARK: Fixed Income
POSITIONS: 8,120
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 6,052,141,704
ACCEPTED: 8,020

Portfolio Allocation by Bond Sector

Sector	Weight (%)			Cont. To Eff. Dur	Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active					
Total	100.00	100.00	0.00	7.66	4.17	1.77	100.00	0.02
Government	56.78	39.95	16.83	5.45	5.76	0.51	28.82	0.02
Mortgage Backed Security	11.66	12.62	-0.96	0.48	2.81	-0.02	-0.99	0.00
Financial	9.65	7.34	2.31	0.33	2.26	0.12	7.06	-0.01
Consumer Discretionary	6.39	11.11	-4.72	0.30	6.20	0.56	31.42	-0.08
Energy	3.63	3.82	-0.19	0.19	7.20	0.02	1.31	-0.05
Health Care	3.14	4.55	-1.41	0.20	5.02	0.11	6.33	-0.04
Industrial	2.20	4.54	-2.34	0.09	4.65	0.07	3.74	-0.04
Telecommunications	2.05	2.98	-0.93	0.14	5.84	0.03	1.78	-0.03
Materials	1.69	2.50	-0.81	0.07	5.01	0.03	1.47	-0.04
Technology	1.43	4.03	-2.60	0.10	5.09	0.36	20.52	-0.10
Utility	1.33	1.80	-0.47	0.10	7.30	-0.01	-0.29	-0.02
Asset Backed Security	1.11	0.09	1.01	0.03	2.76	-0.00	-0.02	-0.01
Consumer Staples	1.04	1.98	-0.94	0.08	6.69	0.01	0.69	-0.02
Commercial Mortgage Backed	0.97	0.07	0.91	0.02	1.97	0.01	0.37	-0.00
Transportation	0.81	1.23	-0.42	0.04	4.72	0.05	2.96	-0.05
Agency	0.32	0.67	-0.35	0.02	5.20	-0.02	-0.96	0.01
Local/Provincial	0.10	0.09	0.01	0.01	6.68	0.00	0.00	-0.02
Sovereign	0.08	0.07	0.01	0.01	8.09	0.00	0.02	-0.03
Supranational	0.00	0.56	-0.56	0.00	1.27	-0.02	-0.93	0.02
Others	-4.37	0.00	-4.37	0.00	0.32	-0.06	-3.29	-0.00



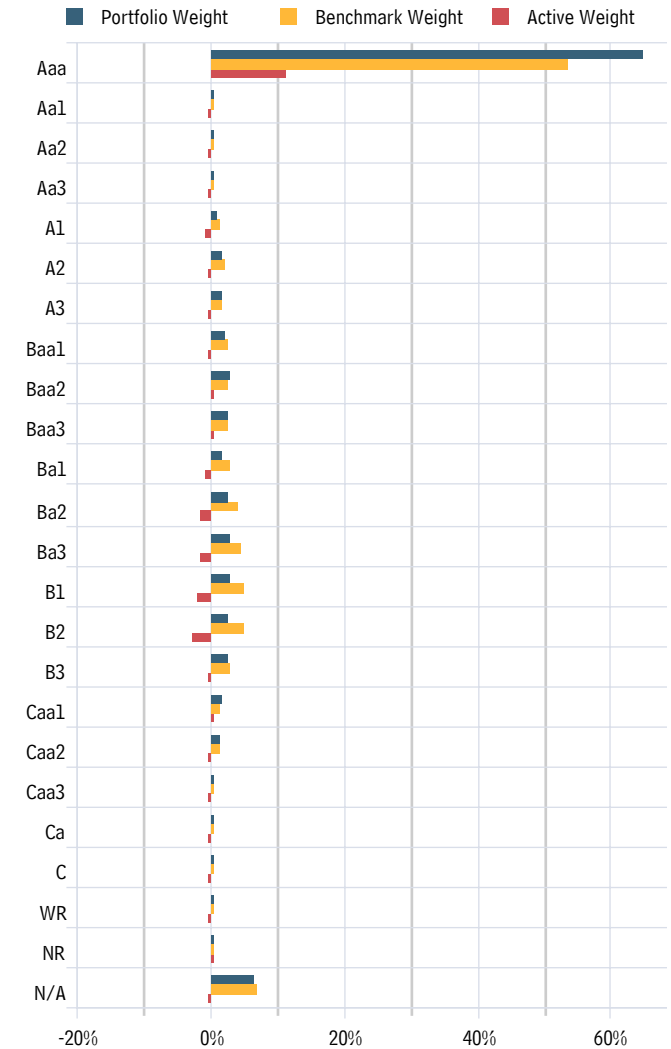
BarraOne Fixed Income Summary

COMPANY: NYCRC - Fire Plan
PORTFOLIO: Public
BENCHMARK: Fixed Income
POSITIONS: 8,120
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2021
MARKET VALUE: 6,052,141,704
ACCEPTED: 8,020

Portfolio Allocation by Moody's Rating

Rating	Weight (%)			Cont. To Eff. Dur	Spread Duration	Total Risk	Active Risk CR	%CR to Active TR
	Portfolio	Benchmark	Active					
Total	100.00	100.00	0.00	7.66	7.67	4.17	1.77	100.00
Aaa	64.49	53.22	11.28	5.76	8.89	5.25	0.39	21.99
Aa1	0.13	0.20	-0.08	0.02	12.82	9.06	-0.00	-0.09
Aa2	0.17	0.45	-0.28	0.02	10.85	6.84	-0.01	-0.32
Aa3	0.14	0.38	-0.24	0.02	12.35	8.12	-0.01	-0.30
A1	0.64	1.26	-0.62	0.06	9.44	5.84	-0.02	-0.88
A2	1.72	2.12	-0.40	0.15	8.56	5.44	-0.01	-0.71
A3	1.43	1.61	-0.18	0.13	8.97	5.58	-0.00	-0.22
Baa1	2.01	2.32	-0.31	0.18	8.68	5.63	0.01	0.29
Baa2	2.67	2.54	0.13	0.23	8.42	5.57	0.00	0.09
Baa3	2.50	2.26	0.24	0.17	6.93	4.70	0.01	0.69
Ba1	1.80	2.69	-0.90	0.11	6.16	4.98	0.01	0.66
Ba2	2.42	3.93	-1.51	0.11	4.62	5.94	0.04	2.13
Ba3	2.88	4.33	-1.45	0.11	3.79	5.12	0.03	1.50
B1	2.79	4.70	-1.92	0.10	3.49	5.45	0.07	4.19
B2	2.26	4.93	-2.66	0.07	3.35	6.15	0.12	6.54
B3	2.38	2.77	-0.39	0.06	2.71	6.59	0.01	0.83
Caa1	1.64	1.38	0.27	0.04	2.68	7.43	-0.01	-0.70
Caa2	1.09	1.10	-0.01	0.03	2.63	6.81	0.01	0.54
Caa3	0.20	0.25	-0.05	0.00	2.13	9.69	0.00	0.25
Ca	0.04	0.06	-0.02	0.00	2.87	14.58	0.00	0.18
C	0.00	0.01	-0.01	0.00	7.92	48.79	0.00	0.07
WR	0.19	0.56	-0.37	0.00	2.38	5.80	0.01	0.50
NR	0.03	0.02	0.01	0.00	2.90	1.03	-0.00	-0.01
Not Rated	6.36	6.92	-0.56	0.28	5.01	2.78	1.11	62.76



BarraOne Fixed Income Summary

COMPANY: NYCRC - Fire Plan
PORTFOLIO: Alternative

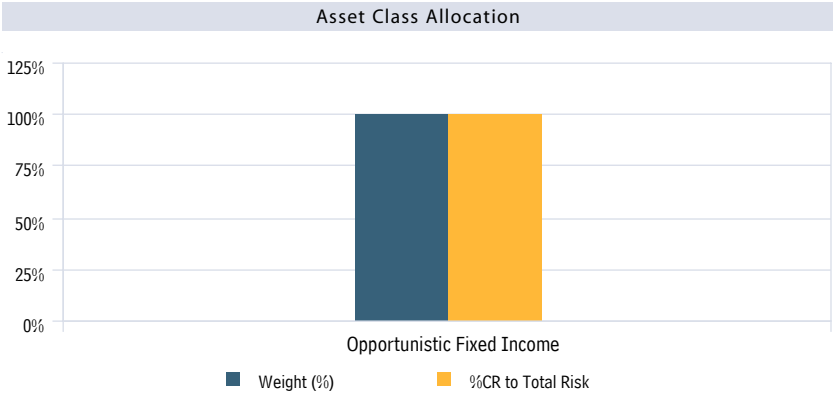
CURRENCY: USD
ANALYSIS DATE: June 30, 2021

Total Plan Summary

POSITIONS: 28
MODEL: MAC.I

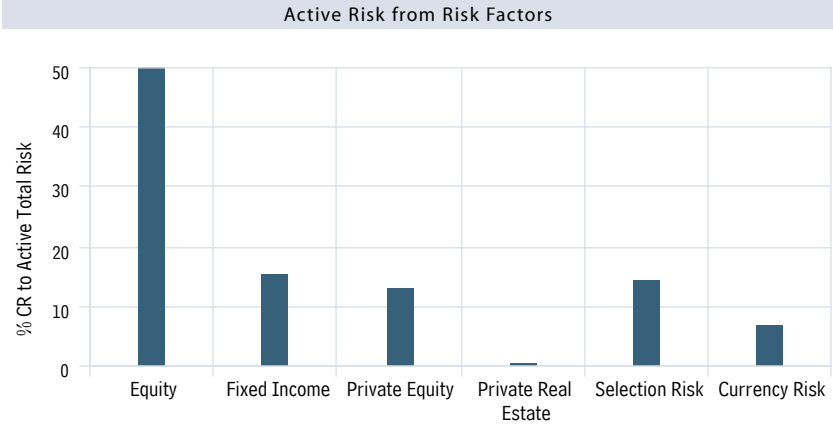
ACCEPTED: 28

Risk Summary		Asset Class Contribution to Risk					
Statistic	Value	Asset Class	Mkt Value	Weight (%)	Total Risk	Risk Contribution	%CR to TR
Total Risk	12.93	Total	594,377,905	100.00	12.93	12.93	100.00
Benchmark Risk	5.61	Opportunistic Fixed Income	594,377,905	100.00	12.93	12.93	100.00
Active Risk	9.27						
Portfolio Beta	1.79						
Cont. to Eff. Duration	11.89						
Convexity	7.70						
Yield to Worst (%)	11.50						
OAS to Swap (bp)	830.65						



Risk Factor Breakdown

Risk Decomposition						
Risk Source	Portfolio			Active		
	Risk Contribution	% Risk	Correlation	Risk Contribution	% Risk	Correlation
Total Risk	12.93	100.00	1.00	9.27	100.00	1.00
Local Market Risk	12.26	94.84	0.99	8.63	93.03	0.99
Common Factor Risk	11.32	87.54	0.96	7.30	78.77	0.91
Equity	5.32	41.19	0.80	4.63	49.91	0.69
Style	1.64	12.66	0.56	1.54	16.64	0.53
Industry	0.12	0.94	0.19	0.10	1.10	0.16
Market	3.57	27.60	0.77	2.99	32.20	0.64
Fixed Income	5.09	39.37	0.80	1.43	15.46	0.35
Implied Volatility	0.03	0.25	0.36	0.00	0.00	0.01
Inflation	-0.01	-0.08	-0.62	-0.01	-0.07	-0.41
Spread	6.16	47.67	0.76	1.40	15.05	0.50
Term Structure	-1.10	-8.48	-0.19	0.04	0.47	0.01
Private Real Estate	0.03	0.21	0.49	0.02	0.26	0.43
Private Equity	0.87	6.77	0.26	1.22	13.15	0.36
Selection Risk	0.94	7.30	0.27	1.32	14.26	0.38
Currency Risk	0.67	5.16	0.43	0.65	6.97	0.42



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BarraOne Fixed Income Summary

COMPANY: NYCERS - Fire Plan
PORTFOLIO: Alternative

CURRENCY: USD
ANALYSIS DATE: June 30, 2021

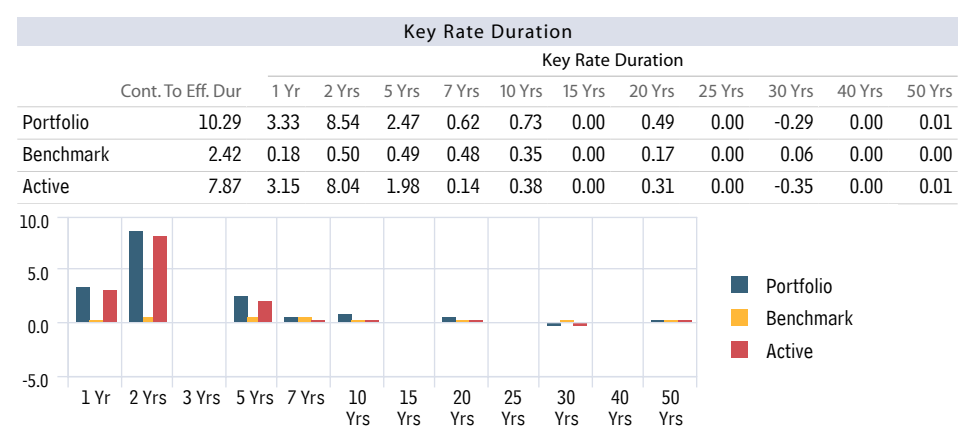
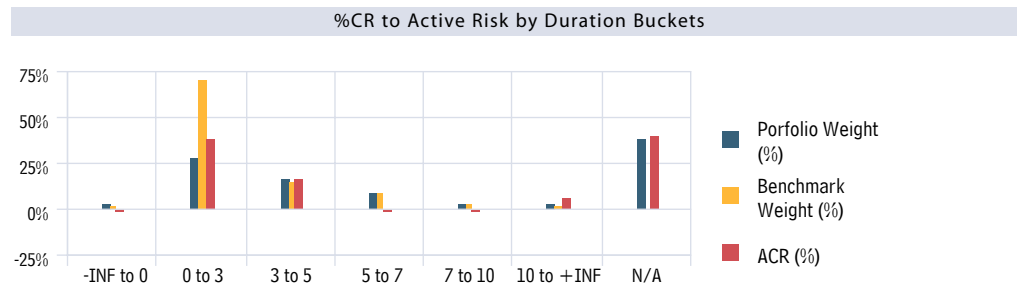
Portfolio by Factor Breakdowns

POSITIONS: 28
MODEL: MAC.I

ACCEPTED: 28

Top 10 Spread Factor									
Spread Factor	Volatility	Exposure (Residual)				Correlation	Contribution (Residual)		
		Portfolio	Benchmark	Active	MCAR		to TR	to AR	to AR%
US Financials HY Spread	36.01	4.78	0.55	4.23	0.17	0.48	1.24	0.73	7.84
US Corporate HY Spread	41.26	2.28	0.00	2.28	0.20	0.48	0.69	0.45	4.91
EU Consumer Discretionary Spre	46.50	1.66	0.04	1.62	0.21	0.45	0.50	0.34	3.65
USD Swap 2Y	0.16	4.70	-0.53	5.23	0.00	0.24	0.18	0.20	2.13
USD Swap 1Y	0.28	1.95	0.10	1.85	0.00	0.29	0.19	0.15	1.59
GB Consumer Discretionary Spre	31.88	1.10	0.03	1.07	0.14	0.42	0.22	0.14	1.56
US Utilities - Electric Utilit	34.65	0.91	0.00	0.91	0.16	0.45	0.21	0.14	1.55
US Health Care HY Spread	48.19	0.75	0.35	0.41	0.21	0.44	0.25	0.09	0.94
EU Corporate HY Spread	39.00	0.31	0.00	0.31	0.17	0.45	0.08	0.05	0.59
EU Materials Spread	43.10	0.36	0.08	0.27	0.20	0.46	0.10	0.05	0.58

Top 10 Term Structure									
Term Structure	Volatility	Exposure (Residual)				Correlation	Contribution (Residual)		
		Portfolio	Benchmark	Active	MCAR		to TR	to AR	to AR%
USD Rate 2Y	0.55	5.36	0.50	4.86	0.00	0.02	-0.53	0.05	0.51
USD Rate 5Y	0.62	1.81	0.78	1.03	0.00	0.06	-0.10	0.04	0.38
USD Rate 1M	0.64	0.02	0.09	-0.08	-0.00	-0.15	-0.00	0.01	0.08
USD Rate 10Y	0.70	0.76	0.54	0.22	0.00	0.03	-0.05	0.00	0.05
USD Rate 30Y	0.69	-0.22	0.06	-0.28	-0.00	-0.01	0.02	0.00	0.03
USD Muni 10Y	1.12	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00
USD Muni 5Y	1.17	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00
CAD Rate 1M	0.53	-0.00	0.00	-0.00	-0.00	-0.15	0.00	0.00	0.00
USD Muni 20Y	1.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00
GBP Rate 5Y	0.47	0.05	0.00	0.05	0.00	0.00	-0.00	0.00	0.00



BarraOne Fixed Income Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Alternative

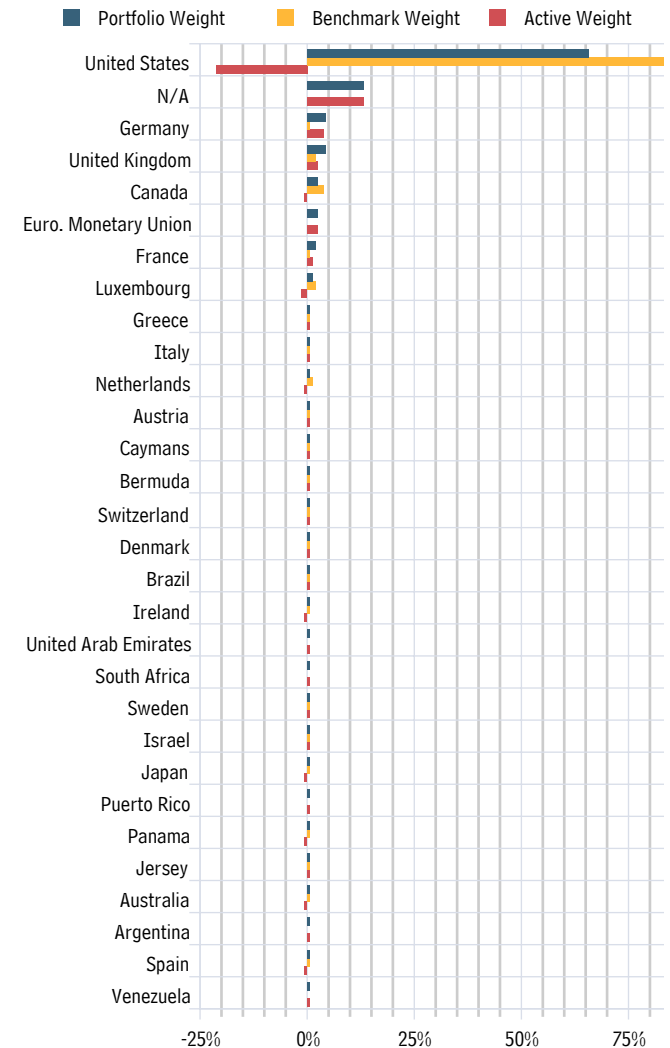
CURRENCY: USD
ANALYSIS DATE: June 30, 2021

POSITIONS: 28
MODEL: MAC.I

ACCEPTED: 28

Top 30 Countries by Weight%

Country of Exposure	Weight (%)			Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active				
Total	100.00	100.00	-0.00	12.93	9.27	100.00	0.09
United States	65.78	86.84	-21.06	13.53	6.39	68.90	0.05
N/A	13.31	0.00	13.31	18.44	1.30	14.01	0.12
Germany	4.29	0.58	3.71	20.42	0.32	3.47	0.09
United Kingdom	4.11	1.69	2.42	24.21	0.49	5.29	0.10
Canada	2.80	3.44	-0.64	9.86	0.01	0.15	0.04
Euro. Monetary Union	2.25	0.00	2.25	6.80	-0.02	-0.18	0.02
France	1.63	0.52	1.11	56.66	0.40	4.32	0.23
Luxembourg	1.07	2.18	-1.11	19.74	0.07	0.75	0.05
Greece	0.77	0.01	0.76	16.67	0.05	0.56	0.09
Italy	0.65	0.52	0.12	17.41	0.03	0.27	0.07
Netherlands	0.41	1.22	-0.82	14.10	0.03	0.28	0.03
Austria	0.38	0.03	0.35	39.10	0.06	0.69	0.18
Caymans	0.37	0.31	0.06	33.90	0.03	0.37	0.08
Bermuda	0.35	0.13	0.21	15.64	0.01	0.11	0.06
Switzerland	0.34	0.25	0.09	5.84	-0.01	-0.08	0.02
Denmark	0.33	0.02	0.30	34.78	0.04	0.38	0.12
Brazil	0.30	0.06	0.24	27.34	0.02	0.25	0.08
Ireland	0.22	0.59	-0.37	17.19	0.01	0.10	0.04
United Arab Emirates	0.12	0.00	0.12	3.50	-0.00	-0.02	0.01
South Africa	0.09	0.00	0.09	80.93	0.01	0.11	0.14
Sweden	0.09	0.06	0.03	9.88	0.00	0.00	0.03
Israel	0.09	0.03	0.05	13.45	0.00	0.02	0.05
Japan	0.07	0.08	-0.00	16.02	0.00	0.04	0.03
Puerto Rico	0.03	0.00	0.03	50.36	0.00	0.01	0.06
Panama	0.03	0.09	-0.06	16.21	-0.00	-0.00	0.03
Jersey	0.02	0.02	0.01	9.94	0.00	0.01	0.02
Australia	0.02	0.38	-0.36	7.40	0.00	0.04	0.02
Argentina	0.02	0.00	0.02	51.74	0.00	0.03	0.20
Spain	0.01	0.02	-0.00	19.60	0.00	0.01	0.04
Venezuela	0.01	0.00	0.01	33.70	0.00	0.01	0.10



BarraOne Fixed Income Summary

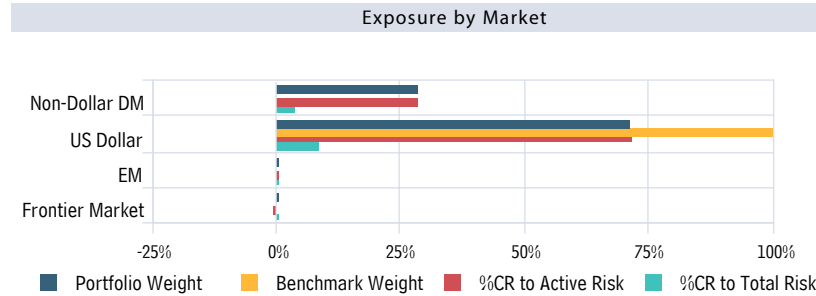
COMPANY: NYCRS - Fire Plan
PORTFOLIO: Alternative

CURRENCY: USD
ANALYSIS DATE: June 30, 2021

POSITIONS: 28
MODEL: MAC.L

ACCEPTED: 28

Portfolio Allocation by Currency



Developed Market Currency				Emerging Market Currency			
Top Five	Exposure \$	CR to AR (%)	CR to TR (%)	Top Five	Exposure \$	CR to AR (%)	CR to TR (%)
US Dollar	423,572,885.47	71.59	68.72	South African Rand	544,995.33	0.11	0.12
Euro	139,291,484.04	22.88	25.25	United Arab Emirates Dirham	527,481.85	-0.03	0.00
British Pound Sterling	23,154,259.96	5.27	5.54	Chinese Yuan	29,819.76	0.00	0.00
Canadian Dollar	4,253,432.43	-0.26	-0.09	Mexican Peso	0.09	0.00	0.00
Danish Krone	1,945,075.78	0.38	0.38				

Top 15 Currencies by Weight%

Currency of Exposure	Weight (%)			Total Risk	CR to TR	CR to TR (%)	CR to AR	CR to AR (%)
	Portfolio	Benchmark	Active					
Total	100.00	100.00	-0.00	12.93	12.93	100.00	9.27	100.00
US Dollar	71.26	100.00	-28.74	13.00	8.88	68.72	6.64	71.59
Euro	23.43	0.00	23.43	16.88	3.26	25.25	2.12	22.88
British Pound Sterling	3.90	0.00	3.90	25.79	0.72	5.54	0.49	5.27
Canadian Dollar	0.72	0.00	0.72	24.53	-0.01	-0.09	-0.02	-0.26
Danish Krone	0.33	0.00	0.33	34.78	0.05	0.38	0.03	0.38
South African Rand	0.09	0.00	0.09	80.93	0.02	0.12	0.01	0.11
United Arab Emirates Dirham	0.09	0.00	0.09	0.04	0.00	0.00	-0.00	-0.03
Swedish Krona	0.08	0.00	0.08	10.26	0.00	0.01	0.00	0.00
Japanese Yen	0.07	0.00	0.07	16.02	0.00	0.03	0.00	0.02
Australian Dollar	0.01	0.00	0.01	10.42	0.00	0.01	0.00	0.00
Norwegian Krone	0.01	0.00	0.01	70.31	0.00	0.02	0.00	0.02
Chinese Yuan	0.01	0.00	0.01	14.94	0.00	0.00	0.00	0.00
Singapore Dollar	0.00	0.00	0.00	4.47	0.00	0.00	-0.00	-0.00
Mexican Peso	0.00	0.00	0.00	15.11	0.00	0.00	0.00	0.00
Swiss Franc	-0.00	0.00	-0.00	7.01	-0.00	-0.00	0.00	0.00

BarraOne Fixed Income Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Alternative

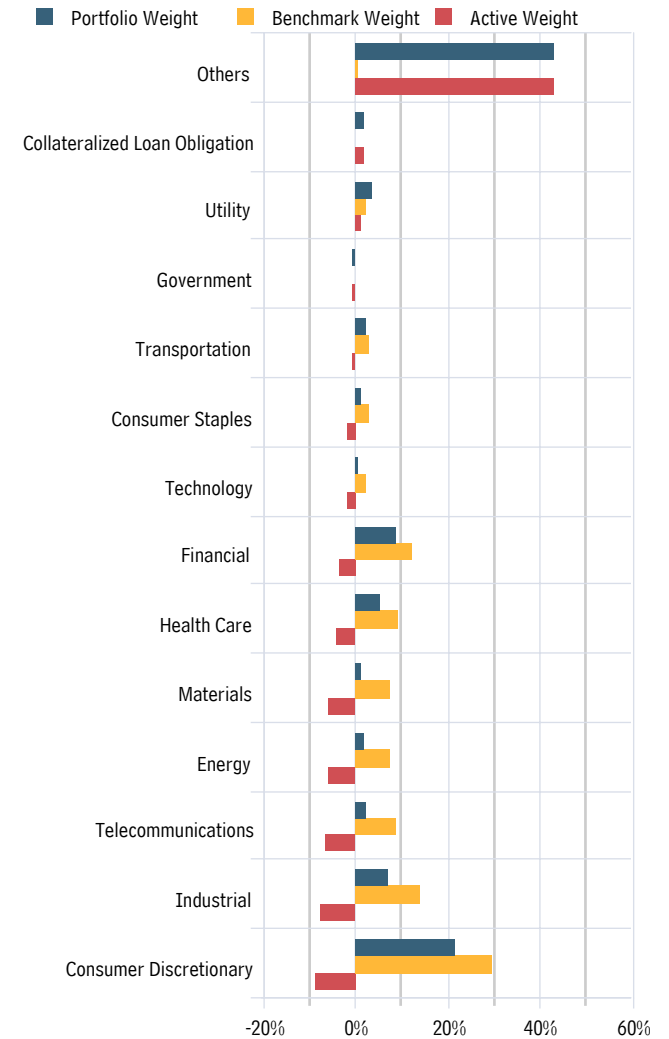
CURRENCY: USD
ANALYSIS DATE: June 30, 2021

POSITIONS: 28
MODEL: MAC.L

ACCEPTED: 28

Portfolio Allocation by Bond Sector

Sector	Weight (%)			Cont. To Eff. Dur	Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active					
Total	100.00	100.00	-0.00	10.29	12.93	9.27	100.00	0.09
Others	42.68	0.01	42.67	0.45	19.20	5.53	59.67	0.07
Consumer Discretionary	21.36	29.80	-8.45	0.39	15.49	1.55	16.68	0.06
Financial	8.60	12.01	-3.40	0.27	34.30	1.24	13.39	0.09
Industrial	6.87	14.19	-7.33	0.15	6.61	0.06	0.63	0.02
Health Care	5.41	9.50	-4.09	0.21	7.04	0.07	0.80	0.03
Utility	3.35	2.36	0.99	0.30	14.83	0.04	0.41	0.04
Telecommunications	2.45	8.55	-6.10	0.03	9.29	0.06	0.69	0.03
Transportation	2.07	2.74	-0.67	0.04	6.35	-0.01	-0.07	0.02
Collateralized Loan Obligat	1.79	0.00	1.79	8.47	239.08	0.63	6.80	0.38
Energy	1.64	7.69	-6.04	0.05	8.59	-0.08	-0.91	0.04
Materials	1.40	7.29	-5.89	0.04	14.97	0.07	0.76	0.03
Consumer Staples	1.18	3.18	-2.01	0.03	9.42	0.01	0.09	0.03
Technology	0.51	2.53	-2.02	0.01	36.03	0.09	0.95	0.05
Commercial Mortgage Backed	0.43	0.00	0.43	0.02	2.51	-0.01	-0.09	0.01
Asset Backed Security	0.42	0.05	0.37	0.01	10.15	0.00	0.00	0.03
Mortgage Backed Security	0.26	0.00	0.26	0.01	2.91	-0.00	-0.05	0.01
Collateralized Debt Obligat	0.08	0.00	0.08	0.01	4.73	-0.00	-0.02	0.00
Local/Provincial	0.03	0.10	-0.07	0.00	52.54	0.00	0.04	0.02
Sovereign	0.02	0.00	0.02	0.00	43.78	0.00	0.04	0.17
Government	-0.55	0.00	-0.55	-0.20	26.28	0.02	0.19	-0.00



BarraOne Fixed Income Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Alternative

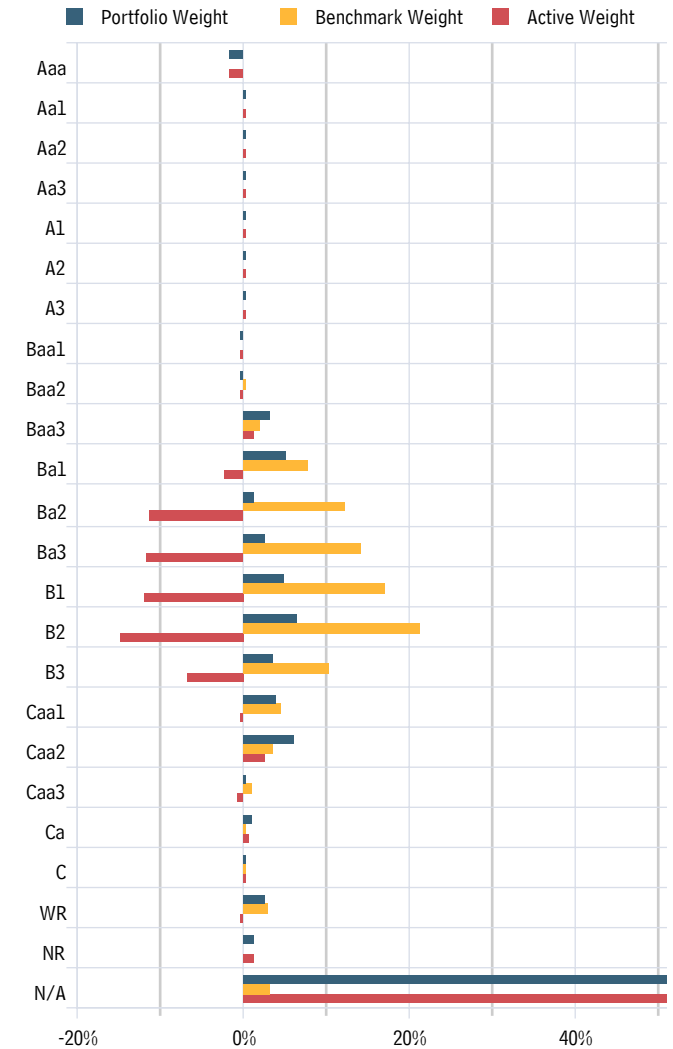
CURRENCY: USD
ANALYSIS DATE: June 30, 2021

POSITIONS: 28
MODEL: MAC.L

ACCEPTED: 28

Portfolio Allocation by Moody's Rating

Rating	Weight (%)			Cont. To Eff. Dur	Spread Duration	Total Risk	Active Risk CR	%CR to Active TR
	Portfolio	Benchmark	Active					
Total	100.00	100.00	-0.00	10.29	6.26	12.93	9.27	100.00
Aaa	-1.56	0.00	-1.56	-0.31	19.36	14.18	0.05	0.49
Aa1	0.00	0.00	0.00	0.00	3.74	2.16	-0.00	-0.00
Aa2	0.01	0.00	0.01	0.00	4.59	2.65	-0.00	-0.00
Aa3	0.01	0.00	0.01	0.00	4.49	2.64	-0.00	-0.00
A1	0.00	0.00	0.00	0.00	3.74	2.46	-0.00	-0.00
A2	0.00	0.00	0.00	0.00	2.73	2.38	-0.00	-0.00
A3	0.00	0.00	0.00	0.00	2.73	2.43	-0.00	-0.00
Baa1	-0.24	0.00	-0.24	-0.04	15.26	14.28	-0.00	-0.01
Baa2	-0.20	0.09	-0.29	-0.02	8.99	7.85	0.00	0.02
Baa3	3.38	2.04	1.35	0.30	8.83	14.57	0.03	0.34
Ba1	5.32	7.72	-2.40	0.25	4.56	54.33	1.26	13.58
Ba2	1.20	12.37	-11.17	0.05	4.37	5.64	0.01	0.09
Ba3	2.63	14.13	-11.50	0.07	2.71	6.12	0.05	0.49
B1	5.00	16.99	-12.00	0.21	4.37	5.52	0.04	0.39
B2	6.56	21.35	-14.79	0.19	3.18	14.07	0.32	3.43
B3	3.51	10.18	-6.67	0.08	2.66	7.36	0.00	0.03
Caa1	3.93	4.37	-0.44	0.05	1.35	4.45	-0.06	-0.70
Caa2	6.12	3.54	2.58	0.22	3.70	12.03	0.18	1.89
Caa3	0.14	0.93	-0.80	0.00	2.62	11.89	-0.01	-0.11
Ca	0.98	0.20	0.79	0.01	0.97	17.14	0.03	0.34
C	0.10	0.03	0.07	0.01	7.29	10.16	-0.00	-0.02
WR	2.61	2.99	-0.38	0.03	1.35	5.24	0.01	0.08
NR	1.30	0.00	1.30	8.44	152.47	332.32	0.59	6.35
Not Rated	59.18	3.07	56.11	0.75	3.60	17.13	6.80	73.30



APPENDICES:

- Basket Clause
- Liquidity Analysis

Basket Limit	25.00%
Basket Consumed	21.89%
Remaining Capacity	3.11%

	Basket-Eligible Assets*				
	Non-Basket Assets	Non-Contributing	Contributing	Basket Assets	Total
FIXED INCOME	31.66%	4.55%	0.01%	4.84%	41.06%
U.S. Fixed	12.96%	3.97%	0.01%	3.94%	20.87%
Cash/Equivalent	7.61%	---	---	0.00%	7.61%
TIPS	3.93%	---	---	---	3.93%
Convertible Bonds	---	---	---	---	---
OFI	0.03%	0.14%	0.00%	2.70%	2.87%
High Yield	0.46%	3.77%	0.00%	1.22%	5.45%
Bank Loans	0.01%	0.00%	0.00%	0.00%	0.02%
ETI Investments	0.56%	---	---	0.01%	0.57%
Core/Core Plus	0.36%	0.05%	---	0.01%	0.42%
U.S. Structured	18.70%	0.58%	---	0.91%	20.20%
Credit	2.85%	0.58%	---	0.05%	3.48%
Mortgages	4.78%	---	---	0.86%	5.64%
ST Treasury	4.92%	---	---	---	4.92%
Treasury/Agency	0.41%	---	---	---	0.41%
MT Treasury	0.03%	---	---	---	0.03%
LT Treasury	5.72%	---	---	---	5.72%
EQUITY	27.16%	14.74%	6.24%	10.80%	58.94%
Public Equity	27.15%	9.99%	6.24%	0.04%	43.42%
U.S. Equity	25.63%	0.65%	0.40%	0.00%	26.68%
EAFE	0.22%	5.25%	3.28%	0.02%	8.76%
Emerging Markets	0.23%	3.69%	2.31%	0.01%	6.25%
Global	1.07%	0.40%	0.25%	0.01%	1.74%
Real Estate Equity	---	---	---	---	---
Alternative Investments	0.01%	4.75%	---	10.76%	15.51%
Hedge Funds	---	---	---	4.53%	4.53%
Infrastructure	0.00%	0.91%	---	---	0.91%
Private RE/Core	0.00%	2.42%	---	---	2.42%
Private RE/Non-Core	0.00%	1.41%	---	---	1.41%
Private Equity	0.01%	---	---	6.23%	6.23%
TOTAL ASSETS	58.82%	19.29%	6.25%	15.64%	100.00%
	Non-Basket:	78.11%	Basket:	21.89%	

This analysis shows basket consumption by investment mandate on a security look-through basis.

* Basket Eligible Assets are subject to the following thresholds - above which investment consumes basket capacity: 10% aggregate portfolio weight for investments in non-U.S. listed equities; 10% aggregate portfolio weight for real assets; and 10% aggregate portfolio weight for investments in high yield bonds and foreign debt issues that are registered with the SEC. To the extent that the value of investments in a particular category exceeds a threshold, the excess consumes basket capacity.

In the above table, the investment of cash held as collateral under the system's securities lending program, is included as a Non-Basket Asset in the Cash/Equivalent line.



AUM as of June 30, 2021

	Current MV	Liquid Assets		
		Today	1 Year	2 Years
PUBLIC EQUITY	\$9,048	\$9,048	\$9,048	\$9,048
U.S.	5,557	5,557	5,557	5,557
EAFE Equity	1,756	1,756	1,756	1,756
Emerging Markets	1,373	1,373	1,373	1,373
Global Equity	361	361	361	361
PUBLIC FIXED INCOME	\$6,095	\$6,004	\$6,068	\$6,068
Short Term Securities	114	114	114	114
U.S. Government	2,306	2,306	2,306	2,306
Long Duration Treasury	0	0	0	0
Mortgages				
Core Mortgages	802	802	802	802
ETI	120	30	93	93
Credit - Investment Grade	808	808	808	808
Corporate - High Yield	1,121	1,121	1,121	1,121
Corporate - Bank Loans	5	5	5	5
UST - Inflation Protected	819	819	819	819
ALTERNATIVE ASSETS	\$3,837	\$567	\$1,114	\$1,244
Private Equity	1,312	0	0	0
Private Real Estate	801	0	0	0
Infrastructure	194	0	0	0
Opportunistic Fixed Income	594	446	594	594
Hedge Funds	936	122	520	649
Total Assets	\$18,980	\$15,619	\$16,229	\$16,359
Total Illiquid \$		\$3,361	\$2,751	\$2,621
Total Illiquid %		17.7%	14.5%	13.8%
Unfunded OFI Commitments	\$165			
Unfunded INF Commitments	\$215			
Unfunded PE Commitments	\$813			
Unfunded RE Commitments	\$433			
Total commitments \$	\$1,626			
Total commitments %	8.6%			



AUM as of June 30, 2021

Denominator Effect - Decrease AUM by One-Third

Total Illiquid \$	\$3,361	\$2,751	\$2,621
Total Illiquid %	26.6%	21.7%	20.7%

Note: Assumes zero realizations, no new commitments and a five-year investment period; funded out of liquids

	Current MV	Liquid Assets		
		Today	1 Year	2 Years
Total Assets	\$18,980	\$15,619	\$16,229	\$16,359

Private Equity, Real Estate, Infrastructure and Opportunistic Fixed Income Stress Case

Unfunded OFI Commitments	\$33	\$66
Unfunded INF Commitments	\$43	\$86
Unfunded PE Commitments Drawn	\$163	\$325
Unfunded RE Commitments Drawn	\$87	\$173
Total commitments \$	\$325	\$650
Total commitments %	1.7%	3.4%

Total Illiquid \$	\$3,076	\$3,271
Total Illiquid %	16.2%	17.2%

Note: Assumes zero realizations, no new commitments and a five-year investment period; funded out of liquids

Denominator Effect - Decrease AUM by One-Third

Total Illiquid \$	\$3,361	\$3,076	\$3,271
Total Illiquid %	26.6%	24.3%	25.9%

Note: Assumes zero realizations, no new commitments and a five-year investment period; funded out of liquids



Additional Assumptions

Alternative Assets Liquidation Estimates: Private Equity, Private Real Estate, and Infrastructure: assumes no liquidations in 2-year horizon; Opportunistic Fixed Income: assumes 75% immediate availability and 100% availability within one year; Hedge Funds: estimates provided by consultant.

Illiquid Ratio: Illiquid investment value for each of the three time horizons as a percentage of current AUM. The ratio is calculated under three scenarios: 1) Unadjusted estimated illiquid value to current total assets. 2) Unadjusted estimated illiquid values to current total assets after a 33% decline. 3) Estimated illiquid value after Fixed Income Stress Case to current total assets after a 33% decline.

Unfunded Commitments: Uses custodian value at month end.

Denominator Effect: Measures Illiquid Ratio for each time horizon after an assumed 33% decline in portfolio value.

Fixed Income Stress Case: Measures impact of new commitments to illiquid asset classes assuming no capital calls and a level 5-year pacing schedule.

