New York City
Police Pension Fund

Monthly Performance Review
May 2020

Prepared for the New York City

Police Pension Fund

07.2020

THE CITY OF NEW YORK
OFFICE OF THE COMPTROLLER

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CITY OF NEW YORK
NYC Police Pension Fund
Market Indicator Report
May 31, 2020

MARKET INDICATORS

	1 Month	3 Month	Fiscal YTD	1 Year	2 Year	3 Year	5 Year	10 Year
S&P 500	4.76	3.59	5.41	12.84	8.22	10.23	9.86	13.15
S&P 400 MIDCAP	7.31	(2.27)	(7.85)	(0.81)	(3.15)	2.51	4.68	10.45
RUSSELL 1000	5.28	3.44	5.16	12.54	7.91	10.09	9.58	13.07
RUSSELL 2000	6.51	(5.18)	(9.81)	(3.44)	(6.28)	1.98	3.72	9.23
RUSSELL 3000	5.35	2.89	4.15	11.46	6.89	9.54	9.17	12.80
RUSSELL 3000 GROWTH	6.87	9.91	16.89	24.99	14.24	16.55	13.91	15.76
RUSSELL 3000 VALUE	3.39	(5.14)	(9.00)	(2.52)	(1.03)	2.16	4.12	9.61
MSCI EAFE NET	4.35	(3.73)	(8.26)	(2.81)	(4.29)	(0.37)	0.79	5.27
MSCI EMF NET	0.77	(6.95)	(10.00)	(4.39)	(6.57)	(0.15)	0.88	2.47
MSCI WORLD NET	4.83	0.89	0.19	6.80	3.19	5.91	5.84	9.28
MSCI EUROPE SMID CAP NET	6.69	(5.72)	(7.11)	(1.51)	(6.21)	(0.95)	1.85	7.52
MSCI AC WORLD ex US NET	3.27	(4.99)	(8.92)	(3.43)	(4.86)	(0.24)	0.79	4.38
FTSE ALL WORLD EX US	3.62	(4.52)	(8.10)	(2.67)	(4.27)	0.25	1.36	5.01
MSCI World ex USA IMI NR	4.64	(3.96)	(8.04)	(2.76)	(4.60)	(0.21)	1.03	5.19
1 YEAR TREASURY BILL YIELD + 4%	0.31	1.83	6.52	7.25	7.02	6.34	5.63	5.01
HFRI FUND OF FUNDS COMPOSITE + 1%	2.41	(2.00)	(0.54)	1.09	0.61	2.60	1.90	3.52
NYC - TREASURY AGENCY PLUS FIVE	(0.74)	4.92	16.92	18.40	13.64	8.47	5.97	5.88
FTSE USBIG Treasury 1-3 Y Index	0.07	1.48	4.03	4.56	4.00	2.63	1.83	1.35
FTSE USBIG Treasury/Agency 1-10 y	0.19	2.56	6.90	7.77	6.49	3.95	2.85	2.63

*NCREIF NFI - ODCE NET index return calculated on a quarterly basis

CITY OF NEW YORK
NYC Police Pension Fund
Market Indicator Report
May 31, 2020

STATE STREET

MARKET INDICATORS

	1 Month	3 Month	Fiscal YTD	1 Year	2 Year	3 Year	5 Year	10 Year
FTSE Treasury 10+	(1.89)	6.08	25.28	26.95	18.71	12.17	8.40	8.27
FTSE MORTGAGE INDEX	0.11	2.01	6.00	6.79	6.20	3.99	3.13	3.23
NYC - INVESTMENT GRADE CREDIT	1.79	(0.57)	7.25	9.47	8.39	5.50	4.76	5.17
FTSE BIG	0.53	1.74	8.23	9.57	7.98	5.11	3.98	3.93
NYC - CORE PLUS FIVE	0.64	1.66	9.16	10.71	8.90	5.72	4.52	4.59
BARCLAYS AGGREGATE	0.47	1.65	8.06	9.42	7.90	5.07	3.94	3.92
FTSE BB & B	4.80	(3.11)	(1.00)	1.52	3.56	3.12	3.94	6.43
FTSE BB & B CAPPED	4.82	(3.43)	(1.42)	1.09	3.30	2.94	3.76	6.28
ICE BofA US High Yield Index	4.57	(4.22)	(2.05)	0.35	2.83	2.65	4.06	6.51
ICE BofA US High Yield Constrained	4.54	(4.26)	(2.10)	0.30	2.80	2.63	4.05	6.50
CSFB LEVERAGED LOAN	3.80	(5.24)	(3.57)	(3.35)	0.27	1.66	2.60	4.17
BARCLAYS GLOBAL US TIPS	0.30	1.28	7.08	8.00	6.17	4.33	3.32	3.55
ICE BofA US Convertibles - Yield Alter	2.73	(6.03)	0.39	3.03	3.25	4.20	3.05	5.00
ICE BofA All IG US Convertibles	1.84	(4.92)	1.22	5.47	4.82	8.53	9.26	10.43
ICE BofA All US Conv Ex Mandatory	7.15	2.71	11.66	16.78	9.88	11.27	8.78	10.71

*NCREIF NFI - ODCE NET index return calculated on a quarterly basis

MARKET INDICATORS

	1 Month	3 Month	Fiscal YTD	1 Year	2 Year	3 Year	5 Year	10 Year
DJ US SELECT REAL ESTATE	(0.63)	(16.73)	(19.19)	(18.09)	(3.85)	(1.80)	1.13	7.44
NCREIF NFI - ODCE NET*	0.00	0.75	3.14	3.93	5.23	5.85	7.48	10.42
CPI + 4%	0.27	(0.29)	3.81	4.24	5.06	5.66	5.60	
91 DAY TREASURY BILL	0.00	0.30	1.62	1.84	2.05	1.79	1.19	0.64

*NCREIF NFI - ODCE NET index return calculated on a quarterly basis

CITY OF NEW YORK
NYC Police Pension Fund
Market Indicator Report
June 30, 2020

MARKET INDICATORS

	1 Month	3 Month	Fiscal YTD	1 Year	2 Year	3 Year	5 Year	10 Year
S&P 500	1.99	20.54	7.51	7.51	8.95	10.73	10.73	13.99
S&P 400 MIDCAP	1.26	24.07	(6.70)	(6.70)	(2.75)	2.39	5.22	11.34
RUSSELL 1000	2.21	21.82	7.48	7.48	8.74	10.64	10.47	13.97
RUSSELL 2000	3.53	25.42	(6.63)	(6.63)	(4.98)	2.01	4.29	10.50
RUSSELL 3000	2.29	22.03	6.53	6.53	7.75	10.04	10.03	13.72
RUSSELL 3000 GROWTH	4.32	27.99	21.94	21.94	16.14	18.21	15.23	16.92
RUSSELL 3000 VALUE	(0.46)	14.55	(9.42)	(9.42)	(1.40)	1.41	4.41	10.23
MSCI EAFE NET	3.40	14.88	(5.13)	(5.13)	(2.08)	0.81	2.05	5.73
MSCI EMF NET	7.35	18.08	(3.39)	(3.39)	(1.12)	1.90	2.86	3.27
MSCI WORLD NET	2.65	19.36	2.84	2.84	4.57	6.70	6.90	9.95
MSCI EUROPE SMID CAP NET	2.80	20.41	(4.51)	(4.51)	(4.29)	0.36	2.83	7.87
MSCI AC WORLD ex US NET	4.52	16.12	(4.80)	(4.80)	(1.80)	1.13	2.26	4.97
FTSE ALL WORLD EX US	4.48	16.56	(3.99)	(3.99)	(1.21)	1.64	2.81	5.59
MSCI World ex USA IMI NR	3.19	16.21	(5.11)	(5.11)	(2.51)	0.80	2.22	5.67
1 YEAR TREASURY BILL YIELD + 4%	0.36	0.98	6.90	6.90	6.99	6.33	5.63	5.00
HFRI FUND OF FUNDS COMPOSITE + 1%	1.67	7.74	1.09	1.09	1.62	3.14	2.43	3.77
NYC - TREASURY AGENCY PLUS FIVE	0.14	0.74	17.08	17.08	13.68	8.58	6.46	5.55
FTSE USBIG Treasury 1-3 Y Index	0.03	0.27	4.06	4.06	4.01	2.67	1.83	1.31
FTSE USBIG Treasury/Agency 1-10 y	0.09	0.58	6.99	6.99	6.55	4.07	2.95	2.50

*NCREIF NFI - ODCE NET index return calculated on a quarterly basis

CITY OF NEW YORK
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June 30, 2020

STATE STREET

MARKET INDICATORS

	1 Month	3 Month	Fiscal YTD	1 Year	2 Year	3 Year	5 Year	10 Year
FTSE Treasury 10+	0.14	0.51	25.45	25.45	18.66	12.06	9.30	7.79
FTSE MORTGAGE INDEX	(0.04)	0.32	5.96	5.96	6.18	4.11	3.29	3.09
NYC - INVESTMENT GRADE CREDIT	1.87	8.28	9.26	9.26	9.70	6.11	5.48	5.16
FTSE BIG	0.68	2.96	8.96	8.96	8.44	5.39	4.35	3.83
NYC - CORE PLUS FIVE	0.84	3.72	10.08	10.08	9.48	6.06	4.99	4.48
BARCLAYS AGGREGATE	0.63	2.90	8.74	8.74	8.30	5.32	4.30	3.82
FTSE BB & B	0.61	9.31	(0.39)	(0.39)	3.73	3.29	4.37	6.35
FTSE BB & B CAPPED	0.38	8.91	(1.04)	(1.04)	3.35	3.04	4.14	6.18
ICE BofA US High Yield Index	0.97	9.61	(1.10)	(1.10)	3.15	2.94	4.58	6.48
ICE BofA US High Yield Constrained	0.95	9.54	(1.17)	(1.17)	3.11	2.92	4.57	6.46
CSFB LEVERAGED LOAN	1.35	9.71	(2.27)	(2.27)	0.89	2.13	2.94	4.34
BARCLAYS GLOBAL US TIPS	1.12	4.24	8.28	8.28	6.54	5.05	3.75	3.52
ICE BofA US Convertibles - Yield Alter	2.53	12.47	2.92	2.92	3.74	4.68	4.02	5.41
ICE BofA All IG US Convertibles	(0.07)	8.35	1.15	1.15	5.73	8.68	9.82	10.69
ICE BofA All US Conv Ex Mandatory	5.49	25.92	17.79	17.79	12.79	12.99	10.45	11.65

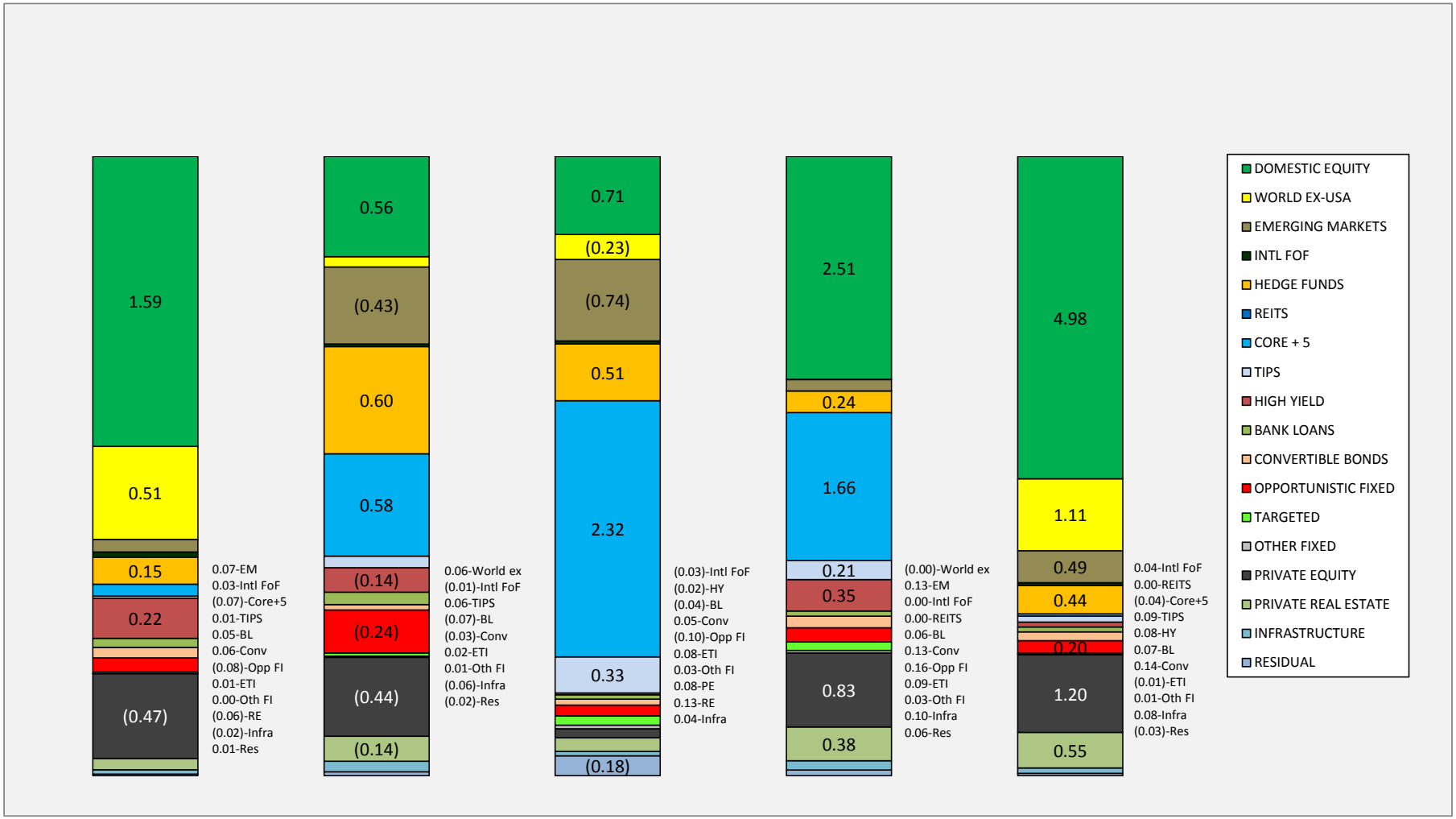
*NCREIF NFI - ODCE NET index return calculated on a quarterly basis

MARKET INDICATORS

	1 Month	3 Month	Fiscal YTD	1 Year	2 Year	3 Year	5 Year	10 Year
DJ US SELECT REAL ESTATE	1.84	9.11	(17.71)	(17.71)	(4.96)	(1.99)	2.42	8.24
91 DAY TREASURY BILL	0.01	0.02	1.63	1.63	1.97	1.77	1.19	0.64

*NCREIF NFI - ODCE NET index return calculated on a quarterly basis

NYC Police Pension Fund Contribution to Return - May 2020



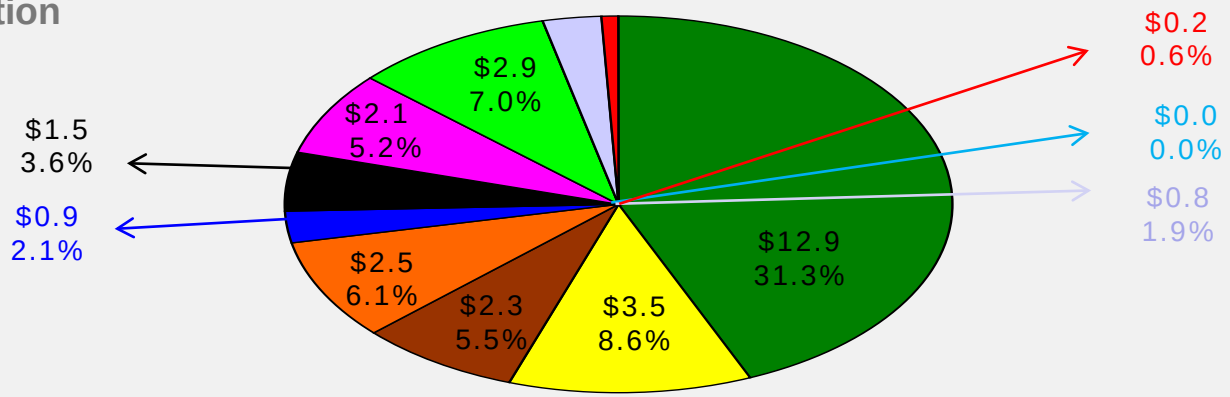
1 Month - Total Fund	3 Months - Total Fund	FYTD - Total Fund	FY Ending 6/30/19 Total	FY Ending 6/30/18 Total
Return: 2.01%	**Return: 0.29%**	**Return: 2.96%**	**Return: 6.95%**	**Return: 9.41%**

Prepared by State Street

Portfolio Asset Allocation – Growth : May 31, 2020

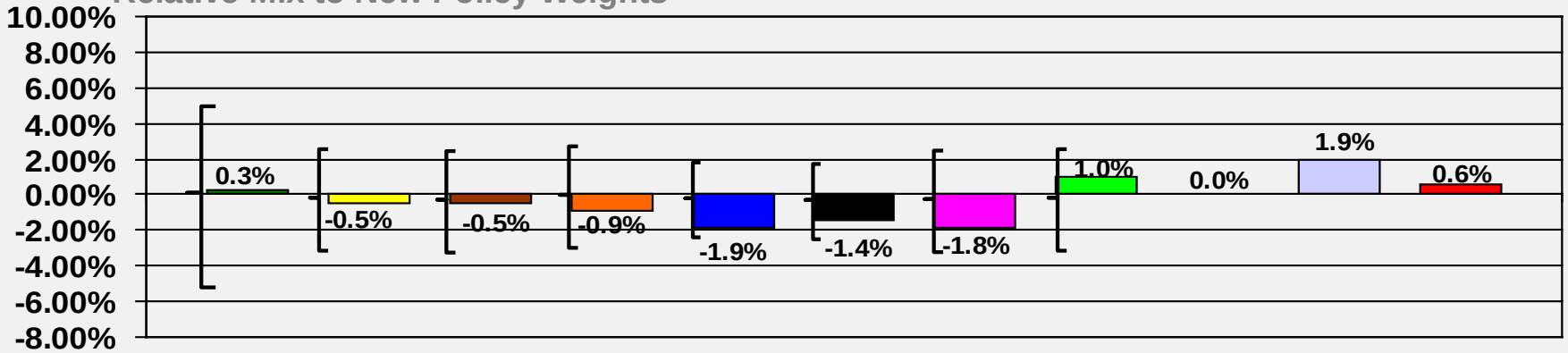
$41.3B Under Management

Asset Allocation



Domestic US Equity | World ex-USA | Emerging Markets | Private Equity | Private Real Estate – Non Core | Opportunistic FI | High Yield | Hedge Funds | REITS | Convertible Bonds | Int'l Emerging Managers FoF

Relative Mix to New Policy Weights



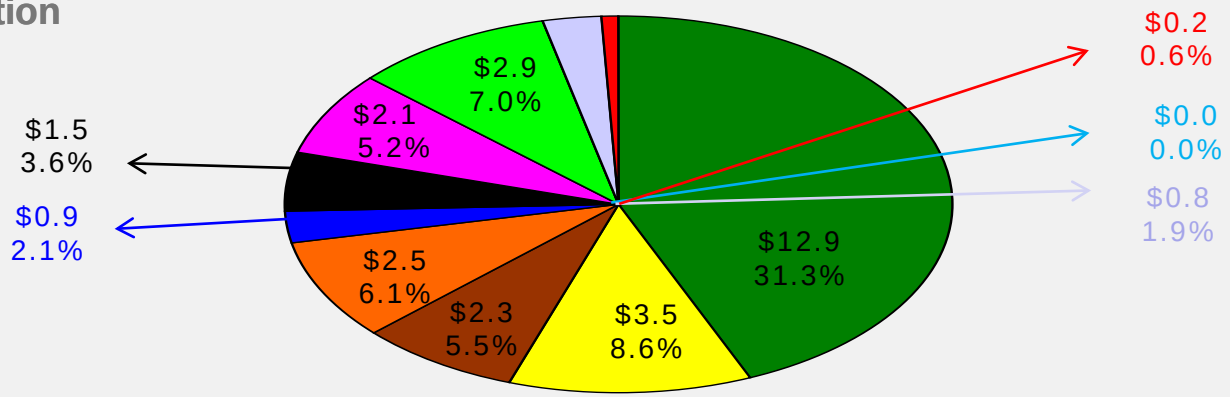
Note: Brackets represent rebalancing ranges versus Policy.

New York City Police Pension Fund, Subchapter 2
Performance Overview as of May 31, 2020
Prepared by State Street

Portfolio Asset Allocation – Growth : May 31, 2020

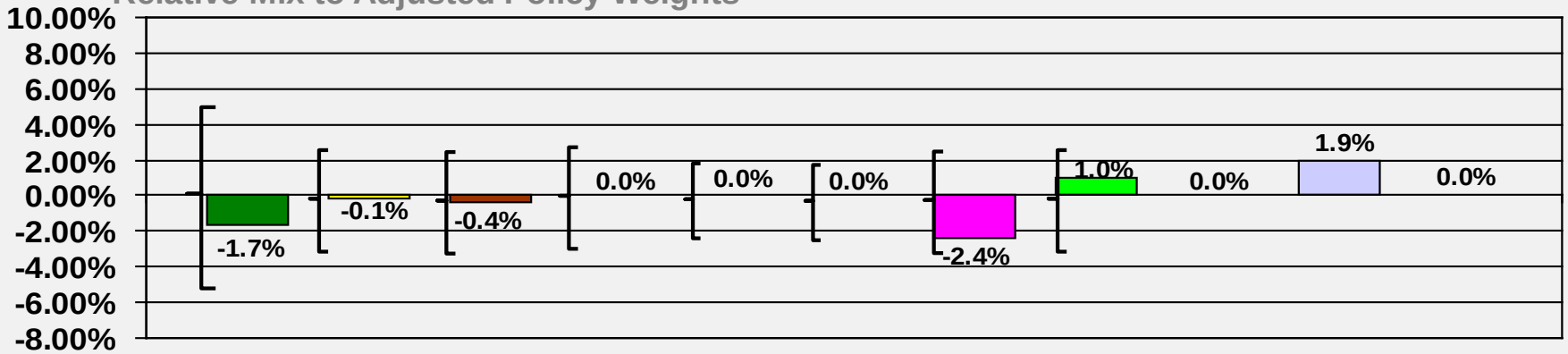
$41.3B Under Management

Asset Allocation



Domestic US Equity | World ex-USA | Emerging Markets | Private Equity | Private Real Estate – Non Core | Opportunistic FI | High Yield | Hedge Funds | REITS | Convertible Bonds | Int'l Emerging Managers FoF

Relative Mix to Adjusted Policy Weights



Note: Brackets represent rebalancing ranges versus Policy.

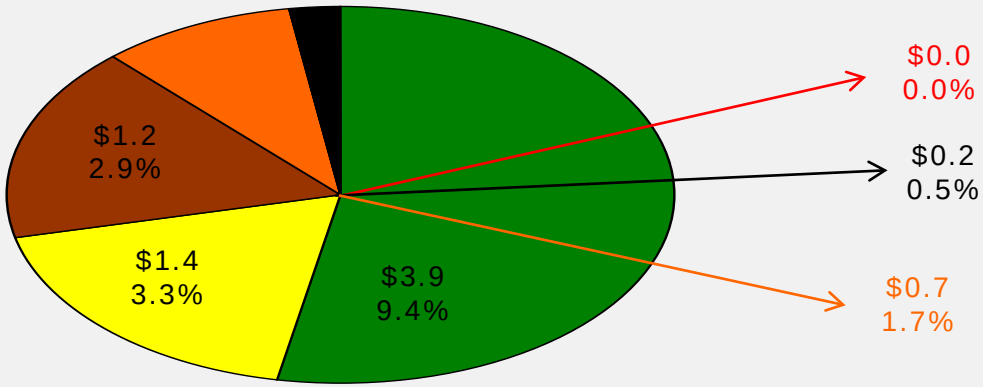
New York City Police Pension Fund, Subchapter 2
Performance Overview as of May 31, 2020
Prepared by State Street

Note: On May 29, 2020 Police's combined Fixed Income and Cash portfolios have a duration of 8.1 years. The duration of the Barclays US Aggregate Index was 6 years on that date.

Portfolio Asset Allocation – Deflation Protection : May 31, 2020

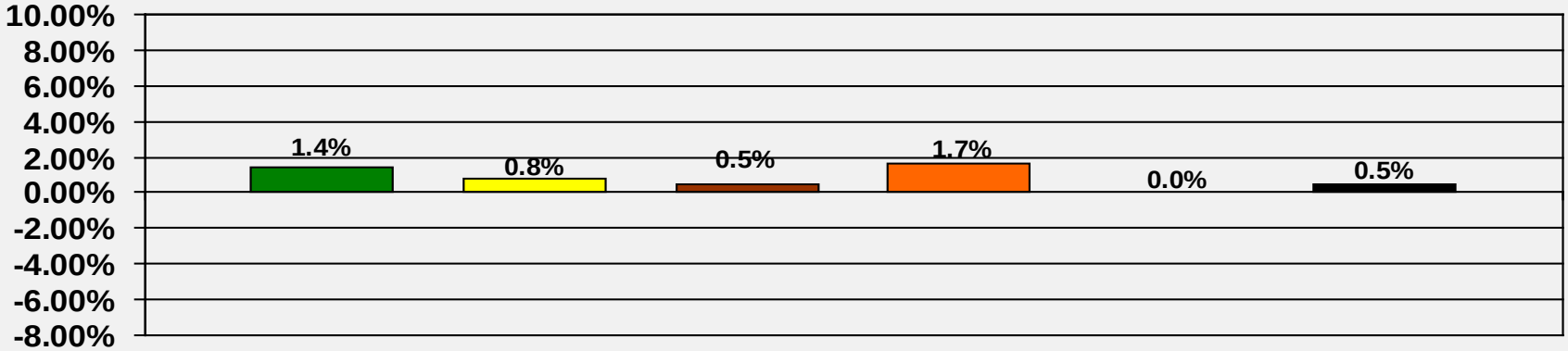
$41.3B Under Management

Asset Allocation



US Government Treasuries | Mortgages | Investment Grade Credit | Short Term | Core Fixed Income-Emerging Managers | Core Fixed Income-Developing Managers

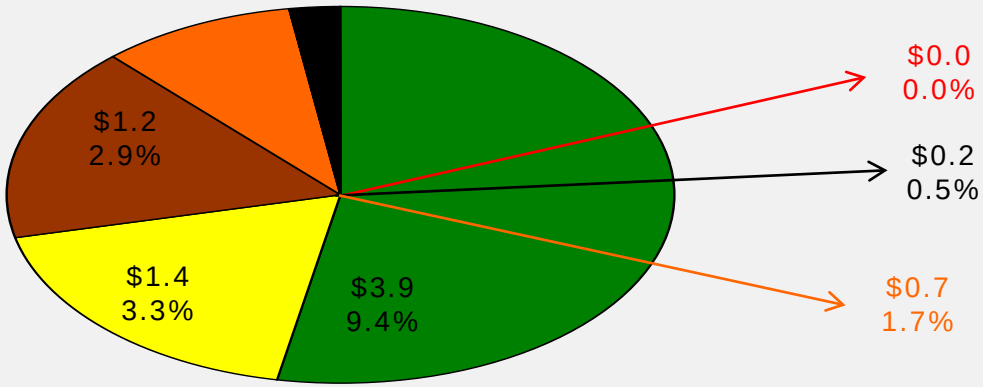
Relative Mix to New Policy Weights



Portfolio Asset Allocation – Deflation Protection : May 31, 2020

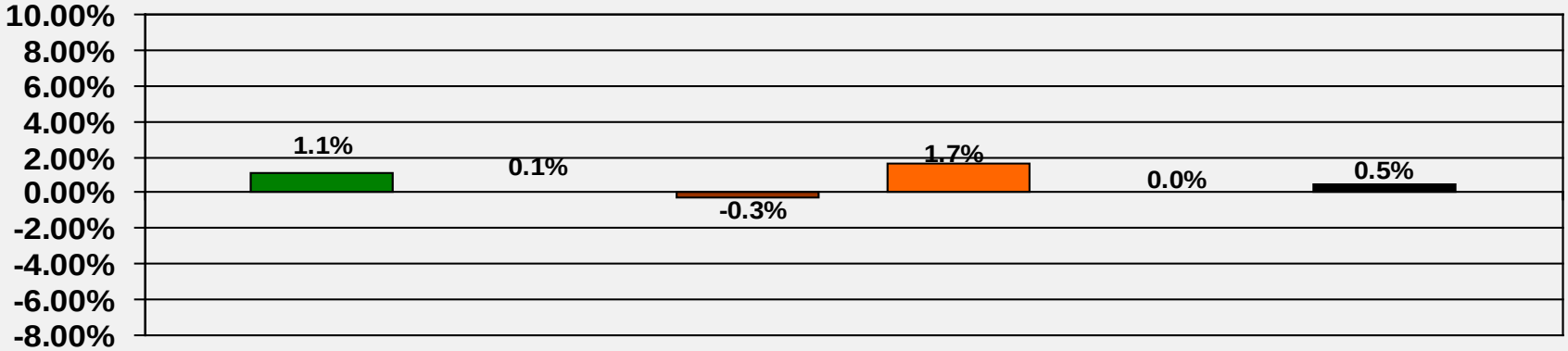
$41.3B Under Management

Asset Allocation



US Government Treasuries | Mortgages | Investment Grade Credit | Short Term | Core Fixed Income-Emerging Managers | Core Fixed Income-Developing Managers

Relative Mix to Adjusted Policy Weights



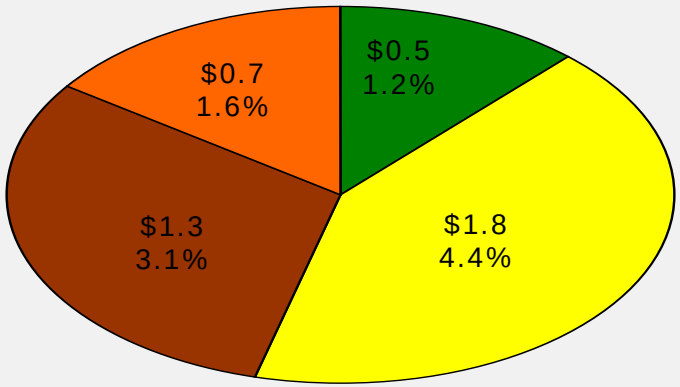
New York City Police Pension Fund, Subchapter 2
Performance Overview as of May 31, 2020
Prepared by State Street

Note: On May 29, 2020 Police's combined Fixed Income and Cash portfolios have a duration of 8.1 years. The duration of the Barclays US Aggregate Index was 6 years on that date.

Portfolio Asset Allocation – Inflation Protection : May 31, 2020

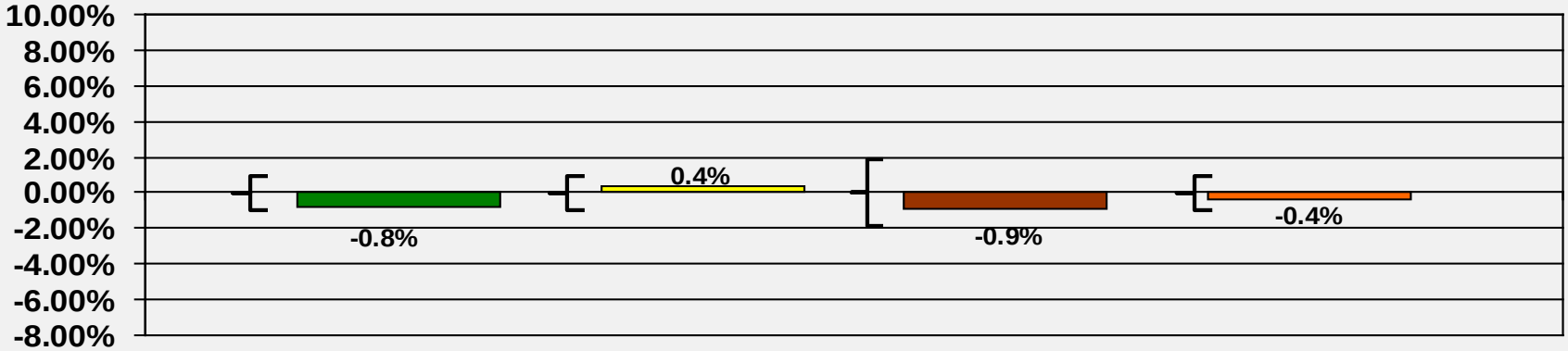
$41.3B Under Management

Asset Allocation



Infrastructure | US TIPS | Real Estate - Core | Bank Loans

Relative Mix to New Policy Weights

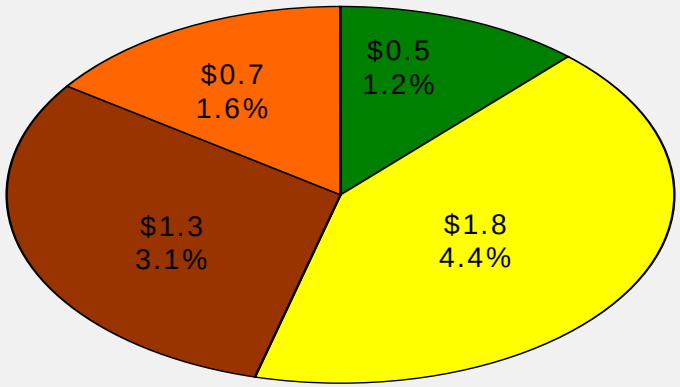


Note: Brackets represent rebalancing ranges versus Policy.

Portfolio Asset Allocation – Inflation Protection : May 31, 2020

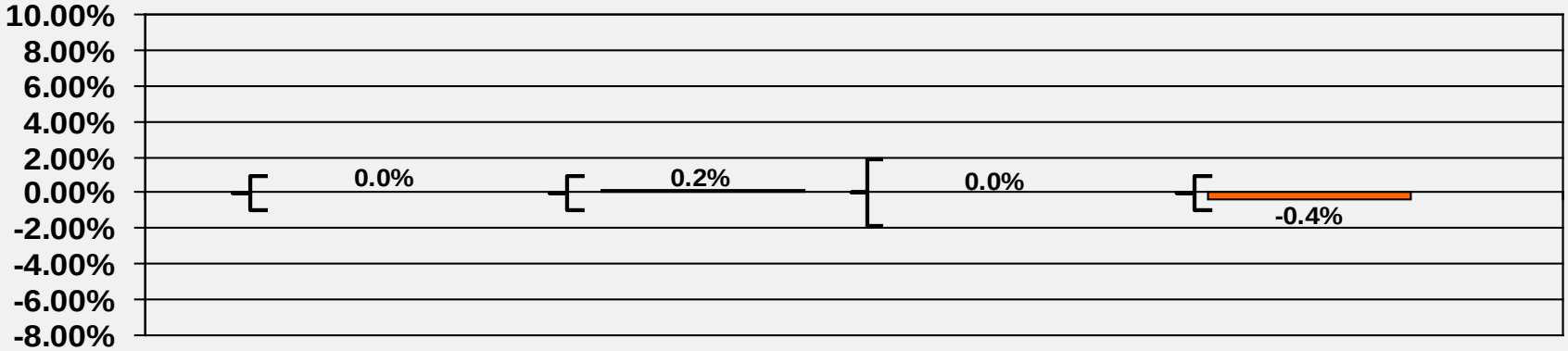
$41.3B Under Management

Asset Allocation



Infrastructure | US TIPS | Real Estate - Core | Bank Loans

Relative Mix to Adjusted Policy Weights



Note: Brackets represent rebalancing ranges versus Policy.

New York City Police Pension Fund, Subchapter 2
Performance Overview as of May 31, 2020
Prepared by State Street

Note: On May 29, 2020 Police's combined Fixed Income and Cash portfolios have a duration of 8.1 years. The duration of the Barclays US Aggregate Index was 6 years on that date.

NYC POLICE DEPARTMENT PENSION FUND
CLASSIFICATION OF INVESTMENTS
(as of May 31st, 2020)

ASSET CLASS ALLOCATIONS

	In $MM	Actual	Policy Target	*Adjustment*	*Adjusted Policy*	*Adjusted Target Range* ***
TOTAL EQUITIES	$27,036.2	65.5%	69.0%	*NA*	*67.8%*	*62.8% - 72.8%*
TOTAL FIXED INCOME	$14,233.1	34.5%	31.0%	*NA*	*32.2%*	*27.2% - 37.2%*
TOTAL ASSETS	$41,269.3	100.0%	100.0%	*NA*	*100.0%*	

	In $MM	Actual	Policy Target	*Adjustment*	*Adjusted Policy*	*Adjusted Target Range* ***
US Equities	$12,897.3	31.3%	31.0%	*2.3%*	*33.3%*	*28.3% - 38.3%*
Non-US Equities/EAFE	$3,530.3	8.6%	9.0%	*0.0%*	*9.0%*	*6.0% - 12.0%*
Emerging Markets	$2,284.5	5.5%	6.0%	*0.0%*	*6.0%*	*3.0% - 9.0%*
Non-US Emerging Mgrs. FoF	$235.8	0.6%	0.0%	*NA*	*0.0%*	-
Real Estate Investment Trusts	$0.0	0.0%	0.0%	*NA*	*0.0%*	*0.0% - 0.0%*
TOTAL PUBLIC EQUITY	$18,947.8	45.9%	46.0%	*2.2%*	*48.2%*	
** HEDGE FUNDS*	$2,887.6	7.0%	6.0%	NA	*7.0%*	*4.0% - 10.0%*
** REAL ESTATE - CORE*	$1,295.9	3.1%	4.0%	NA	*3.1%*	*1.1% - 5.1%*
** REAL ESTATE - OPPORTUNISTIC*	$884.5	2.1%	4.0%	NA	*2.1%*	*0.1% - 4.1%*
** PRIVATE EQUITY*	$2,517.7	6.1%	7.0%	NA	*6.1%*	*3.1% - 9.1%*
PRIVATE INFRASTRUCTURE	$502.8	1.2%	2.0%	NA	*1.2%*	*0.2% - 2.2%*
TOTAL EQUITIES	$27,036.2	65.5%	69.0%	NA	67.8%	*62.8% - 72.8%*

	In $MM	Actual	Policy Target	*Adjustment*	*Adjusted Policy*	*Adjusted Target Range* ***
U.S. Treasuries – All Maturities	$2,089.6	5.1%	0.0%	*NA*	*0.0%*	*-4.0% - 4.0%*
U.S. Treasuries - Longer Than Twenty Years	$1,800.3	4.4%	8.0%	*0.3%*	*8.3%*	*4.3% - 12.3%*
Core Mortgage-Backed Securities	$916.9	2.2%	0.5%	*0.7%*	*1.2%*	*0.2% - 2.2%*
Credit - Investment Grade Corporates	$1,217.4	2.9%	2.5%	*0.7%*	*3.2%*	*2.2% - 4.2%*
High Yield	$2,133.4	5.2%	*7.0%*	*0.7%*	*7.7%*	*4.7% - 10.7%*
Bank Loans	$652.0	1.6%	*2.0%*	*NA*	*2.0%*	*1.0% - 3.0%*
Total High Yield & Bank Loans	$2,785.4	6.7%	9.0%	*0.7%*	*9.7%*	*4.7% - 10.7%*
TIPS	$1,806.6	4.4%	4.0%	*0.2%*	*4.2%*	*3.2% - 5.2%*
Convertible Bonds	$802.4	1.9%	0.0%	*NA*	*0.0%*	*0.0% - 0.0%*
** ETI	$450.8	1.1%	2.0%	*NA*	*2.0%*	*1.0% - 3.0%*
Cash	$691.0	1.7%	0.0%	*NA*	*0.0%*	*0.0% - 0.0%*
TOTAL PUBLIC FIXED INCOME	$12,560.2	30.4%	26.0%	*NA*	*28.6%*	
** OPPORTUNISTIC FIXED INCOME*	$1,483.8	3.6%	5.0%	*NA*	*3.6%*	*-0.4% - 5.6%*
OTHER FIXED INCOME	$189.0	0.5%	0.0%	*NA*	*0.0%*	*0.0% - 0.0%*
TOTAL FIXED INCOME	$14,233.1	34.5%	31.0%	NA	*32.2%*	27.2% - 37.2%

*** Ranges for illiquid asset classes represent minimums and maximums which will be monitored and will influence pacing analysis but will not necessarily result in purchases or sales.**

**** ETIs have a policy of 2% of the total Fund. The ETI adjusted policy % is shown for illustrative purposes only and is not included in the sub-totals. The ETI policy % is included within the policy % of the other asset classes.**

***** Adjusted Target Ranges are calculated as follows: Total Equities: +/-5%; Total Fixed Income: +/-5%; US Equities: +/-5%; Non-US Equities/EAFE: +/-3%; Emerging Markets: +/-3%; Hedge Funds: +/-3%; Real Estate Core: +/-2%; Real Estate Opportunistic: +/-2%; Private Equity: +/-3%; US Treasuries All Maturities: +/-4%; US Treasuries Longer than 20 Years: +/-4%; Mortgage Backed Securities: +/-1%; Investment Grade Corporates: +/-1%; TIPS: +/-1%; High Yield: +/-3%; Bank Loans: +/-1%; OFI: +/-2%.**

Information Classification: General

NYC POLICE DEPARTMENT PENSION FUND
CLASSIFICATION OF INVESTMENTS
(as of May 31st, 2020)

Adjustments to Long-Term Asset Allocation

1) **Private Equity**
100% of uninvested commitments will be invested in Domestic Equity.

2) **Real Estate Core**
40% of uninvested commitments will be invested in US Equity, 12% of uninvested commitments will be invested in US Treasuries, 24% of uninvested commitments will be invested in Investment Grade Corporates, and 24% of uninvested commitments will be invested in Mortgage Backed Securities.

3) **Real Estate Opportunistic**
60% of uninvested commitments will be invested in US Equity, 8% of uninvested commitments will be invested in US Treasuries, 16% of uninvested commitments will be invested in Investment Grade Corporates, and 16% of uninvested commitments will be invested in Mortgage Backed Securities.

4) **Infrastructure**
27% of uninvested commitments will be invested in US Equity, 18% of uninvested commitments will be invested in Developed Ex-US Equity, 5% of uninvested commitments will be invested in Emerging Markets Equity, 5% of uninvested commitments will be invested in US Treasuries, 10% of uninvested commitments will be invested in Investment Grade Corporates, 10% of uninvested commitments will be invested in Mortgage Backed Securities, and 25% of uninvested commitments will be invested in TIPS.

5) **Opportunistic Fixed Income**
10% of uninvested commitments will be invested in US Treasuries, 20% of uninvested commitments will be invested in Investment Grade Corporates, 20% of uninvested commitments will be invested in Mortgages Backed Securities, and 50% of uninvested commitments will be invested in High Yield.

6) **Hedge Funds**
27% of uninvested commitments will be invested in US Equity, 18% of uninvested commitments will be invested in Developed Ex-US Equity, 5% of uninvested commitments will be invested in Emerging Markets Equity, 10% of uninvested commitments will be invested in US Treasuries, 20% of uninvested commitments will be invested in Investment Grade Corporates, and 20% of uninvested commitments will be invested in Mortgage Backed Securities.

Impact of Adjustments

1) U.S. Treasuries - Longer Than Twenty Years	**8.0%**
Adjustment: 12% of uninvested Real Estate Core	0.1%
Adjustment: 8% of uninvested Real Estate Opportunistic	0.1%
Adjustment: 5% of uninvested Private Infrastructure	0.0%
Adjustment: 10% of uninvested Hedge Funds	-0.1%
Adjustment: 10% of uninvested Opportunistic Fixed Income	0.1%
Total U.S. Treasuries - Longer Than Twenty Years	**8.3%**
2) Credit - Investment Grade Corporates	**2.5%**
Adjustment: 24% of uninvested Real Estate Core	0.2%
Adjustment: 16% of uninvested Real Estate Opportunistic	0.3%
Adjustment: 10% of uninvested Private Infrastructure	0.1%
Adjustment: 20% of uninvested Hedge Funds	-0.2%
Adjustment: 20% of uninvested Opportunistic Fixed Income	0.3%
Total Credit - Investment Grade Corporates	**3.2%**

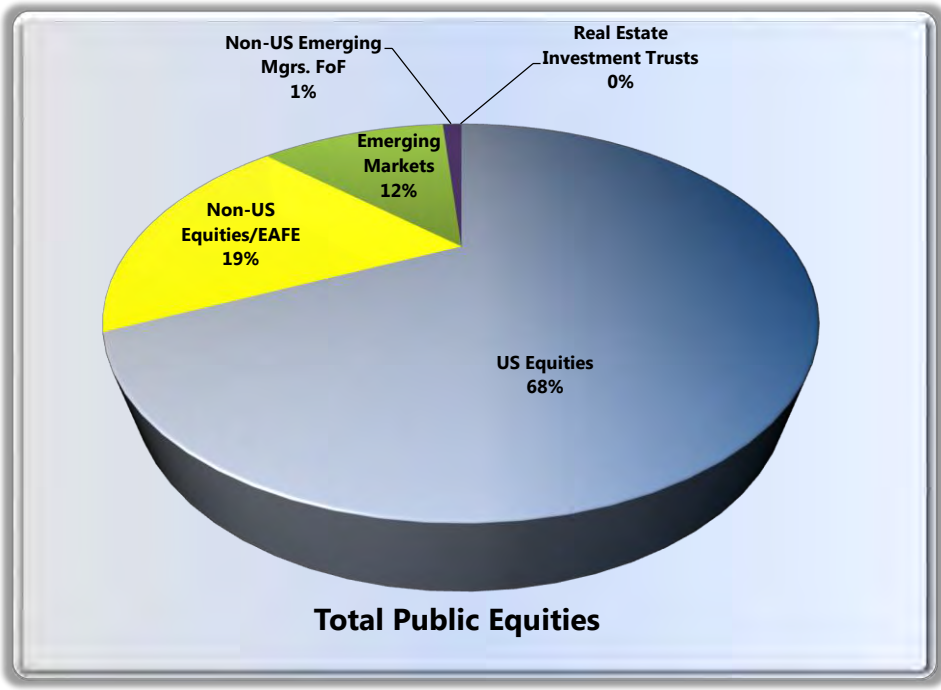
Information Classification: General

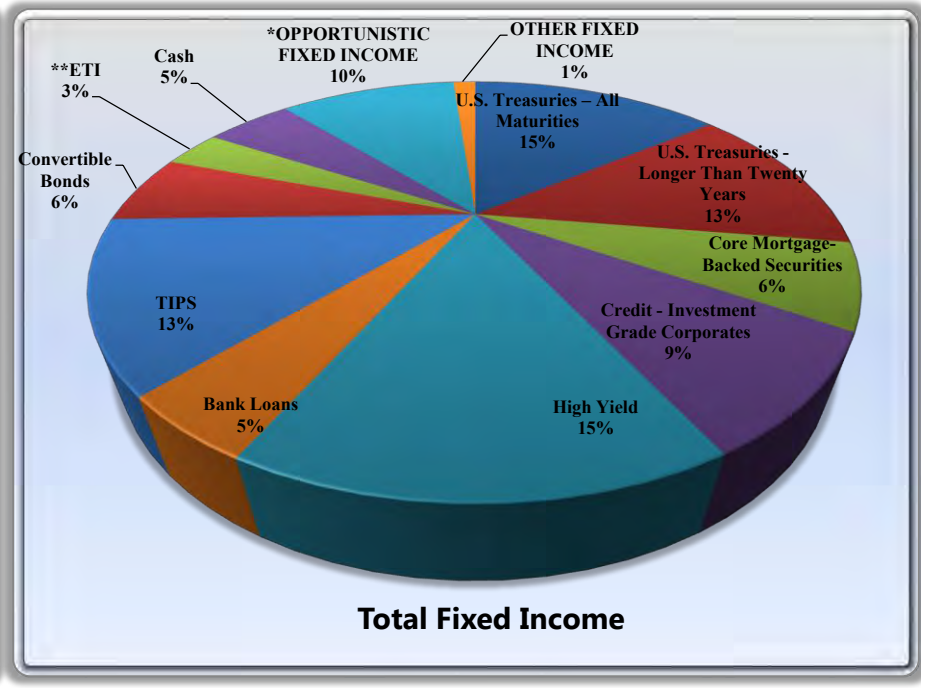
NYC POLICE DEPARTMENT PENSION FUND
CLASSIFICATION OF INVESTMENTS
(as of May 31st, 2020)

3) Core Mortgage-Backed Securities	**0.5%**
Adjustment: 24% of uninvested Real Estate Core	0.2%
Adjustment: 16% of uninvested Real Estate Opportunistic	0.3%
Adjustment: 10% of uninvested Private Infrastructure	0.1%
Adjustment: 20% of uninvested Hedge Funds	-0.2%
Adjustment: 20% of uninvested Opportunistic Fixed Income	0.3%
Total Core Mortgage-Backed Securities	**1.2%**
4) High Yield Securities	**7.0%**
Adjustment: 50% of uninvested Opportunistic Fixed Income	0.7%
** Existing Convertibles holdings to be placeholder for HY Securities	
Total High Yield Securities	**7.7%**
5) Domestic Equity	**31.0%**
Adjustment: 100% of uninvested Private Equity	0.9%
Adjustment: 40% of uninvested of uninvested Real Estate Core	0.3%
Adjustment: 60% of uninvested Real Estate Opportunistic	1.1%
Adjustment: 27% of uninvested Private Infrastructure	0.2%
Adjustment: 27% of uninvested Hedge Funds	-0.3%
Total Domestic Equity	**33.3%**
6) Treasury Inflation Protected Securities	**4.0%**
Adjustment: 25% of uninvested Private Infrastructure	0.2%
Total Treasury Inflation Protected Securities	**4.2%**
7) Non-U.S. Equity - Emerging Markets	**6.0%**
Adjustment: 5% of uninvested Private Infrastructure	0.0%
Adjustment: 5% of uninvested Hedge Funds	0.0%
Total Non-U.S. Equity - Emerging Markets	**6.0%**
8) Non-U.S. Equity - Developed Mkts.	**9.0%**
Adjustment: 18% of uninvested Private Infrastructure	0.1%
Adjustment: 18% of uninvested Hedge Funds	-0.2%
Total Non-U.S. Equity	**9.0%**

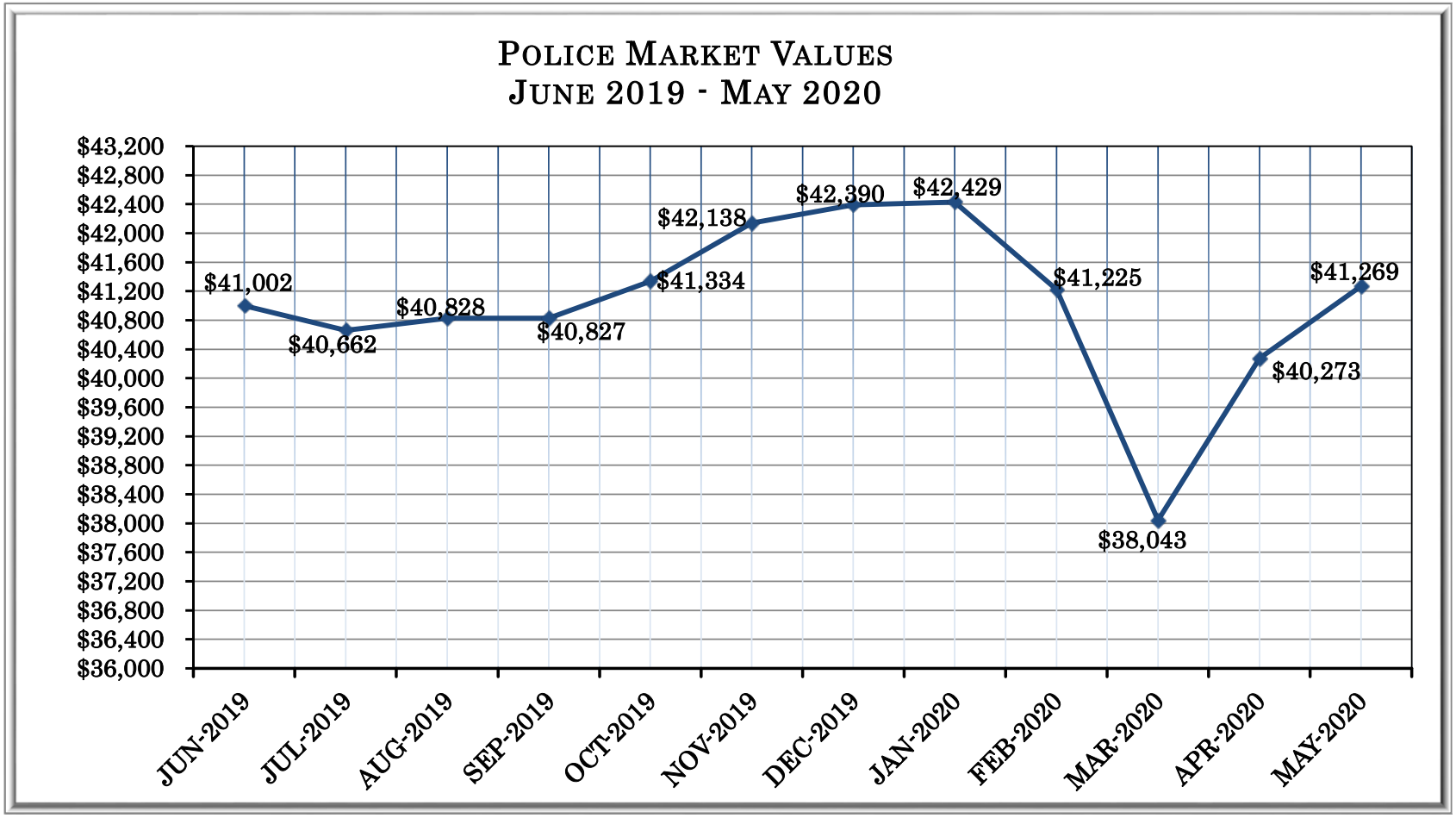
Information Classification: General

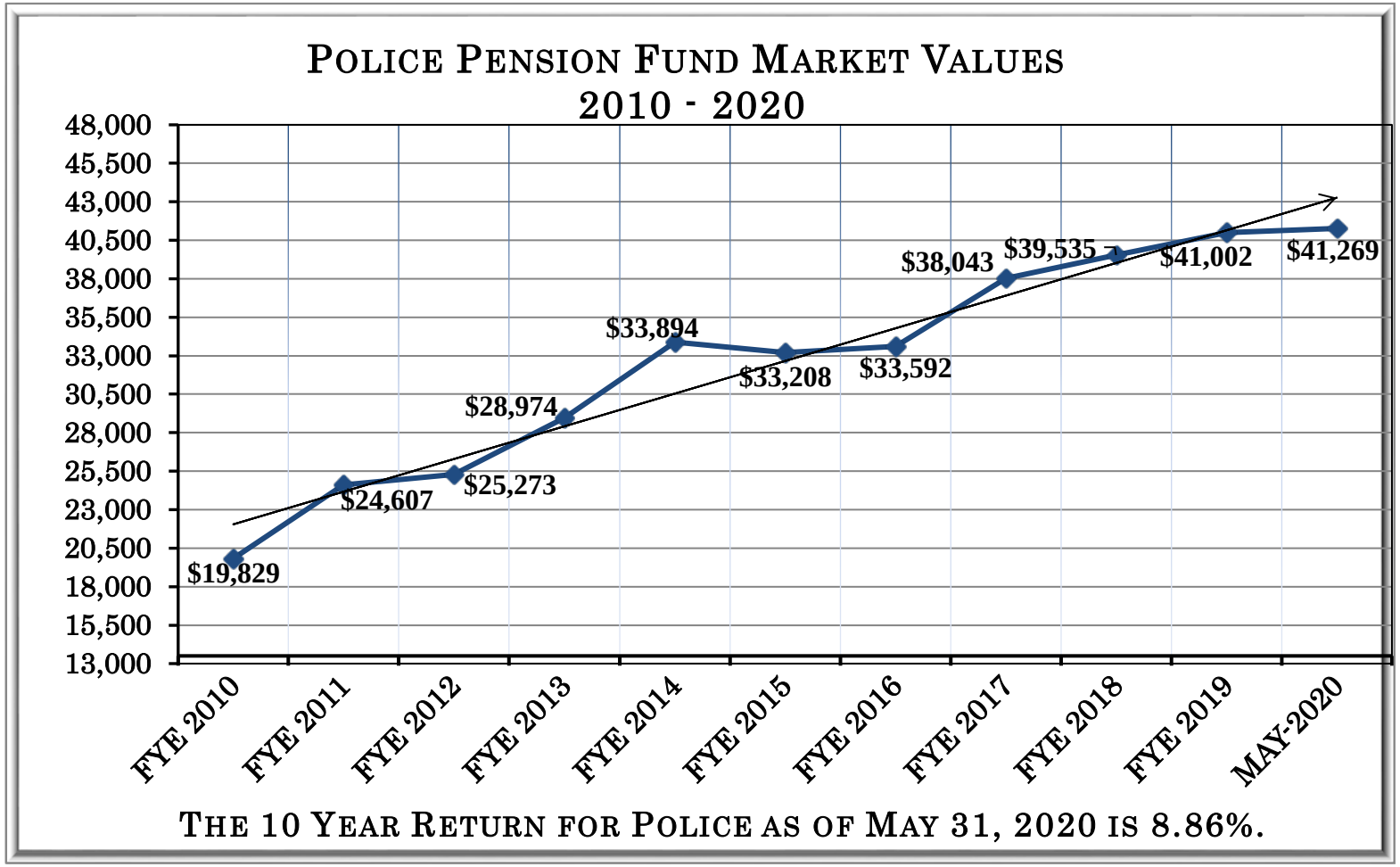
NYC POLICE DEPARTMENT PENSION FUND
CLASSIFICATION OF INVESTMENTS
(as of May 31st, 2020)





Note: Totals may not equal 100% due to rounding


POLICE MARKET VALUES
JUNE 2019 - MAY 2020
$43,200
$42,800
$42,400
$42,000
$41,600
$41,200
$40,800
$40,400
$40,000
$39,600
$39,200
$38,800
$38,400
$38,000
$37,600
$37,200
$36,800
$36,400
$36,000
$41,002
$40,662
$40,828
$40,827
$41,334
$42,138
$42,390
$42,429
$41,225
$38,043
$40,273
$41,269
JUN-2019
JUL-2019
AUG-2019
SEP-2019
OCT-2019
NOV-2019
DEC-2019
JAN-2020
FEB-2020
MAR-2020
APR-2020
MAY-2020



THE 10 YEAR RETURN FOR POLICE AS OF MAY 31, 2020 IS 8.86%.

New York City Police Pension Fund

Manager / Benchmark Comparison Report

Rates of Return - Net Mgr

Periods Ending May 31, 2020

	Assets ($MM)	% of Total	Trailing 1 Month	Trailing 3 Month	FYTD	CYTD	FYE 06/30/19	FYE 06/30/18	CYE 12/31/19	CYE 12/31/18	Trailing 1 Year	Trailing 3 Year	Inception Date
ASSET CLASS SUMMARY													
POLICE-TOTAL DOMESTIC EQUITY	12,897.25	31.25	5.24	1.88	2.24	(6.96)	8.19	14.81	29.91	(5.54)	9.43	8.64	12/01/1984
POLICE-TOTAL WORLD ex-USA	3,530.27	8.55	6.25	0.72	(2.63)	(9.98)	(0.02)	11.61	25.20	(14.63)	3.35	2.69	04/01/2004
POLICE-TOTAL EMERGING MARKETS	2,284.49	5.54	1.33	(8.42)	(13.29)	(18.27)	2.12	7.40	17.77	(14.74)	(8.05)	(1.34)	11/01/1996
POLICE-TOTAL INTL FOF	235.75	0.57	5.16	(2.63)	(4.59)	(11.36)	0.12	10.74	25.10	(15.05)	1.28	1.85	05/01/2017
POLICE-TOTAL HEDGE FUNDS	2,887.57	7.00	2.19	9.21	7.88	8.02	3.91	8.50	4.69	2.38	10.32	6.75	07/01/2011
POLICE-TOTAL REAL ESTATE SECURITIES													
POLICE-TOTAL STRUCTURED	6,024.13	14.60	(0.47)	3.54	14.90	11.82	9.47	(0.23)	10.75	(0.89)	16.38	7.86	01/01/1985
POLICE-TOTAL CONVERTIBLE BONDS	802.36	1.94	3.02	(1.60)	2.71	(3.81)	6.85	8.32	16.94	(0.55)	6.16	6.14	07/01/2008
POLICE-TOTAL TIPS MANAGERS	1,806.55	4.38	0.23	1.40	7.23	4.99	4.82	2.18	8.44	(1.27)	8.10	4.40	06/01/2005
POLICE-TOTAL HIGH YIELD	2,133.41	5.17	4.36	(2.68)	(0.33)	(4.37)	7.07	1.64	14.63	(3.12)	2.04	2.77	10/01/1994
POLICE-TOTAL BANK LOANS	652.02	1.58	3.20	(4.28)	(2.44)	(5.38)	3.49	4.59	8.02	0.82	(2.24)	1.84	12/01/2012
POLICE-TOTAL OPPORTUNISTIC FIXED	1,483.82	3.60	(2.08)	(6.40)	(2.91)	(5.13)	5.15	6.99	5.29	6.23	(2.90)	3.10	10/01/2007
POLICE-TOTAL CORE FI- EMERGING MGRS	0.00	0.00					7.85	0.07	8.88	(0.05)			06/01/2012
POLICE-TOTAL CORE FI- DEVELOPING MGRS	189.03	0.46	1.94	1.15	7.31	4.52	7.75	(0.72)	9.79	(1.19)	8.86	4.67	05/01/2009
TOTAL POLICE ETI (w/o cash)	450.77	1.09	0.73	1.62	7.78	5.58	9.31	(0.94)	8.67	0.82	8.95	5.35	12/01/1984
POLICE-TOTAL PRIVATE EQUITY	2,517.69	6.10	(6.94)	(6.54)	1.27	(5.27)	13.16	19.50	10.72	17.96	1.79	11.30	04/01/2004
POLICE-TOTAL PRIVATE REAL ESTATE	2,180.41	5.28	(1.15)	(2.56)	2.45	(0.74)	7.93	12.20	6.51	10.58	2.81	7.58	04/01/2004
POLICE-TOTAL INFRASTRUCTURE	502.79	1.22	(1.89)	(4.68)	3.50	(2.94)	12.11	16.43	12.51	14.61	3.96	10.59	12/01/2013
POLICE-TOTAL CASH	690.12	1.67	0.01	0.43	3.93	1.93	2.82	1.84	3.55	2.28	4.20	2.89	04/01/2004
SECURITY LENDING	0.88	0.00											04/01/2004
POLICE-TOTAL POLICE	41,269.33	100.00	2.01	0.29	2.96	(2.87)	6.95	9.41	17.41	(2.33)	6.78	6.54	07/01/1987
POLICE-TOTAL EQUITY	18,947.77	45.91	4.98	0.37	(0.72)	(8.95)	5.68	13.04	27.33	(8.80)	5.96	6.10	08/01/1993
POLICE-TOTAL HEDGE FUNDS	2,887.57	7.00	2.19	9.21	7.88	8.02	3.91	8.50	4.69	2.38	10.32	6.75	07/01/2011
POLICE-TOTAL FIXED INCOME (MINUS SS)	13,542.10	32.81	0.60	0.50	7.62	4.37	7.67	1.53	10.65	(0.41)	9.05	5.51	04/01/2004
POLICE-TOTAL PRIVATE EQUITY	2,517.69	6.10	(6.94)	(6.54)	1.27	(5.27)	13.16	19.50	10.72	17.96	1.79	11.30	04/01/2004
POLICE-TOTAL REAL ESTATE SECURITIES													
POLICE-TOTAL PRIVATE REAL ESTATE	2,180.41	5.28	(1.15)	(2.56)	2.45	(0.74)	7.93	12.20	6.51	10.58	2.81	7.58	04/01/2004
POLICE-TOTAL INFRASTRUCTURE	502.79	1.22	(1.89)	(4.68)	3.50	(2.94)	12.11	16.43	12.51	14.61	3.96	10.59	12/01/2013
POLICE-TOTAL CASH	690.12	1.67	0.01	0.43	3.93	1.93	2.82	1.84	3.55	2.28	4.20	2.89	04/01/2004
Securities Lending	0.88	0.00											04/01/2004
POLICE-TOTAL POLICE	41,269.33	100.00	2.01	0.29	2.96	(2.87)	6.95	9.41	17.41	(2.33)	6.78	6.54	07/01/1987
Police Policy Benchmark			2.30	0.18	3.96	(2.45)	7.58	8.64	18.89	(2.67)	8.07	6.87	06/01/1994

New York City Police Pension Fund

Manager / Benchmark Comparison Report

Rates of Return - Net Mgr

Periods Ending May 31, 2020

	Assets ($MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/19	FYE 6/30/18	CYE 12/31/19	CYE 12/31/18	Inception Date
ASSET CLASS SUMMARY												
POLICE-TOTAL POLICE	**41,269**	**100.00**	**2.01**	**0.29**	**6.78**	**2.96**	**(2.87)**	**6.95**	**9.41**	**17.41**	**(2.33)**	**07/01/1987**
Police Policy Benchmark			2.30	0.18	8.07	3.96	(2.45)	7.58	8.64	18.89	(2.67)	07/01/1987
Excess			(0.29)	0.11	(1.29)	(1.01)	(0.42)	(0.63)	0.78	(1.48)	0.35	
POLICE-TOTAL EQUITY (INCL ALTS & REITS)	27,036	65.51	2.80	0.15	5.59	0.52	(6.43)	6.47	13.25	21.24	(3.75)	04/01/2004
POLICE-TOTAL FIXED INCOME	14,232	34.49	0.57	0.44	8.87	7.47	4.25	7.48	1.71	10.42	(0.35)	02/01/1980
EQUITY SUMMARY												
POLICE-TOTAL DOMESTIC EQUITY	12,897	31.25	5.24	1.88	9.43	2.24	(6.96)	8.19	14.81	29.91	(5.54)	12/01/1984
RUSSELL 3000 (DAILY)			5.35	2.89	11.46	4.15	(5.63)	8.98	14.78	31.02	(5.24)	12/01/1984
Excess			(0.11)	(1.01)	(2.03)	(1.91)	(1.33)	(0.80)	0.03	(1.11)	(0.30)	
BlackRock US SCG R2000	44	0.11	9.45	1.69	7.25	(0.40)	(6.65)	(0.36)	21.98	28.39	(9.14)	10/01/2013
RUSSELL 2000 GROWTH DAILY			9.45	1.74	7.32	(0.35)	(6.65)	(0.49)	21.86	28.48	(9.31)	10/01/2013
Excess			0.00	(0.05)	(0.07)	(0.05)	0.00	0.13	0.11	(0.09)	0.17	
BlackRock US SCV R2000	63	0.15										10/01/2013
RUSSELL 2000 VALUE DAILY			2.87					(6.24)	13.10	22.39	(12.86)	10/01/2013
Excess												
Brown Asset Mgmt US SCG	254	0.61	13.04	17.79	20.45	12.56	11.02	10.17	28.66	29.71	0.98	05/01/2009
RUSSELL 2000 GROWTH DAILY			9.45	1.74	7.32	(0.35)	(6.65)	(0.49)	21.86	28.48	(9.31)	05/01/2009
Excess			3.59	16.05	13.13	12.91	17.67	10.66	6.80	1.23	10.29	
William Blair-US SCG	114	0.28	10.04	0.05			(5.69)					01/01/2020
RUSSELL 2000 GROWTH DAILY			9.45	1.74			(6.65)					01/01/2020
Excess			0.59	(1.69)			0.96					
Ceredex US SCV	0	0.00						(3.90)	16.40		(11.72)	01/01/2013
RUSSELL 2000 VALUE DAILY			2.87					(6.24)	13.10	22.39	(12.86)	01/01/2013
Excess								2.33	3.30		1.15	
Dalton US SCV	120	0.29	3.16	(12.55)	(11.32)	(17.25)	(24.44)	(5.65)	8.62	24.83	(17.30)	05/01/2002
RUSSELL 2000 VALUE DAILY			2.87	(12.95)	(14.69)	(19.80)	(25.65)	(6.24)	13.10	22.39	(12.86)	05/01/2002
Excess			0.29	0.41	3.37	2.55	1.21	0.58	(4.48)	2.44	(4.43)	
Pzena-US SCV	59	0.14	2.33	(15.75)			(30.73)					01/01/2020
RUSSELL 2000 VALUE DAILY			2.87	(12.95)			(25.65)					01/01/2020
Excess			(0.54)	(2.80)			(5.08)					
DFA US SCC	136	0.33	5.96	(6.05)	(7.01)	(13.53)	(18.68)	(5.16)	15.55	21.78	(12.54)	09/01/2013
RUSSELL 2000 (DAILY)			6.51	(5.18)	(3.44)	(9.81)	(15.95)	(3.31)	17.57	25.52	(11.01)	09/01/2013
Excess			(0.55)	(0.87)	(3.57)	(3.72)	(2.73)	(1.85)	(2.01)	(3.74)	(1.52)	
Legal General US LMCE	1,093	2.65	5.80	(1.90)		(3.80)	(11.18)					07/01/2019
RUSSELL 1000 (DAILY)			5.28	3.44		5.16	(4.91)					07/01/2019
Excess			0.53	(5.34)		(8.95)	(6.26)					
RAFI US SCE	0	0.00						(6.67)	16.88		(11.57)	07/01/2008
RUSSELL 2000 (DAILY)			6.51					(3.31)	17.57	25.52	(11.01)	07/01/2008
Excess								(3.36)	(0.69)		(0.56)	
Cooke and Bieler-US SCV	44	0.11	7.38	(8.79)			(19.66)					01/01/2020
RUSSELL 2000 VALUE DAILY			2.87	(12.95)			(25.65)					01/01/2020
Excess			4.51	4.16			5.99					
Iridian US MCC	0	0.00							6.34		(23.30)	11/01/2010
RUSSELL MIDCAP (DAILY)			7.03					7.83	12.33	30.54	(9.06)	11/01/2010
Excess									(5.99)		(14.24)	

New York City Police Pension Fund

Manager / Benchmark Comparison Report

Rates of Return - Net Mgr

Periods Ending May 31, 2020

	Assets ($MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/19	FYE 6/30/18	CYE 12/31/19	CYE 12/31/18	Inception Date
Wellington US MCC	341	0.83	5.97	2.05	5.22	(1.28)	(6.56)	8.17	19.51	32.70	(7.35)	10/01/2010
S&P 400 MIDCAP INDEX (DAILY)			7.31	(2.27)	(0.81)	(7.85)	(13.86)	1.36	13.50	26.20	(11.08)	10/01/2010
Excess			(1.34)	4.33	6.03	6.57	7.30	6.81	6.01	6.50	3.73	
BlackRock US LMC R1000 Core	7,738	18.75	5.27	3.43	12.86	5.36	(4.70)	10.24		31.48		04/01/2018
RUSSELL 1000 (DAILY)			5.28	3.44	12.54	5.16	(4.91)	10.02		31.43		04/01/2018
Excess			(0.01)	(0.01)	0.32	0.21	0.21	0.22		0.06		
PIMCO RAFI US LMCE	1,255	3.04	3.39	(5.06)	(1.76)	(8.60)	(16.79)	5.07	13.34	25.42	(6.92)	07/01/2008
RUSSELL 1000 (DAILY)			5.28	3.44	12.54	5.16	(4.91)	10.02	14.54	31.43	(4.78)	07/01/2008
Excess			(1.89)	(8.50)	(14.29)	(13.75)	(11.88)	(4.95)	(1.20)	(6.01)	(2.13)	
SSGA Russell Top 200	1,573	3.81	4.68	5.23	16.41	8.67	(2.72)	10.97		31.74		05/01/2018
RUSSELL TOP 200 INDEX (DAILY)			4.69	5.20	16.33	8.64	(2.77)	10.89		31.75		05/01/2018
Excess			(0.01)	0.03	0.07	0.03	0.05	0.08		(0.01)		
FUND OF FUNDS												
Essex US SCG - Legato	10	0.02	5.67	(7.29)	(5.30)	(11.98)	(17.48)	0.21	24.83	26.80	(5.25)	05/01/2017
RUSSELL 2000 GROWTH DAILY			9.45	1.74	7.32	(0.35)	(6.65)	(0.49)	21.86	28.48	(9.31)	05/01/2017
Excess			(3.78)	(9.02)	(12.63)	(11.63)	(10.83)	0.70	2.97	(1.68)	4.06	
Dean US SCV - Legato	10	0.02	2.93	(13.00)	(15.78)	(21.53)	(27.14)	(2.94)	6.41	21.89	(12.49)	05/01/2017
RUSSELL 2000 VALUE DAILY			2.87	(12.95)	(14.69)	(19.80)	(25.65)	(6.24)	13.10	22.39	(12.86)	05/01/2017
Excess			0.06	(0.05)	(1.09)	(1.73)	(1.49)	3.30	(6.68)	(0.50)	0.37	
Bridge City US SCG - Legato	13	0.03	5.86	(1.82)	3.47	(4.97)	(11.17)	5.08	21.15	24.49	0.89	05/01/2017
RUSSELL 2000 GROWTH DAILY			9.45	1.74	7.32	(0.35)	(6.65)	(0.49)	21.86	28.48	(9.31)	05/01/2017
Excess			(3.59)	(3.56)	(3.86)	(4.62)	(4.53)	5.57	(0.71)	(3.99)	10.19	
Bowling US SCV - Legato	9	0.02	4.43	(14.10)	(19.01)	(23.85)	(26.44)	(10.69)	12.02	18.77	(19.60)	05/01/2017
RUSSELL 2000 VALUE DAILY			2.87	(12.95)	(14.69)	(19.80)	(25.65)	(6.24)	13.10	22.39	(12.86)	05/01/2017
Excess			1.56	(1.15)	(4.32)	(4.05)	(0.79)	(4.46)	(1.07)	(3.63)	(6.74)	
Altravue US SCV - Legato	9	0.02	1.13	(6.29)	(7.06)	(9.57)	(14.91)	(0.23)	7.17	20.05	(10.08)	05/01/2017
RUSSELL 2000 VALUE DAILY			2.87	(12.95)	(14.69)	(19.80)	(25.65)	(6.24)	13.10	22.39	(12.86)	05/01/2017
Excess			(1.74)	6.66	7.63	10.23	10.74	6.00	(5.93)	(2.34)	2.79	
Lisanti US SCG - Legato	12	0.03	13.05	5.97	8.78	0.98	(0.29)	8.79		27.53		03/01/2018
RUSSELL 2000 GROWTH DAILY			9.45	1.74	7.32	(0.35)	(6.65)	(0.49)		28.48		03/01/2018
Excess			3.60	4.23	1.46	1.33	6.36	9.28		(0.96)		
Legato Transition US												
POLICE-TOTAL WORLD ex-USA	3,530	8.55	6.25	0.72	3.35	(2.63)	(9.98)	(0.02)	11.61	25.20	(14.63)	04/01/2004
WORLD ex-USA CUSTOM BM			4.64	(3.96)	(2.76)	(8.04)	(14.42)	0.16	7.82	22.91	(14.68)	04/01/2004
Excess			1.61	4.67	6.10	5.41	4.44	(0.18)	3.78	2.30	0.05	
Baillie Gifford WorldxUS LMCC	807	1.95	13.32	17.93	30.05	20.91	9.21	(2.39)	24.73	37.00	(15.37)	01/01/2008
NYC Developed Growth Benchmark			4.25	(4.23)	(3.12)	(8.55)	(14.42)	1.29	6.47	22.49	(14.09)	01/01/2008
Excess			9.07	22.16	33.17	29.46	23.63	(3.68)	18.26	14.51	(1.28)	
Walter Scott WorldxUS LMCC	713	1.73	5.05	5.17	9.65	3.37	(5.10)	8.91	10.95	28.51	(7.68)	05/01/2013
NYC Developed Growth Benchmark			4.25	(4.23)	(3.12)	(8.55)	(14.42)	1.29	6.47	22.49	(14.09)	05/01/2013
Excess			0.80	9.40	12.77	11.92	9.31	7.62	4.48	6.02	6.41	
Causeway WorldxUS LMCV	461	1.12	4.59	(8.51)	(9.19)	(14.20)	(21.42)	(4.01)	6.86	21.35	(18.34)	05/01/2013
NYC Developed Value Benchmark			4.25	(4.23)	(3.12)	(8.55)	(14.42)	1.29	7.43	22.49	(14.09)	05/01/2013
Excess			0.34	(4.29)	(6.07)	(5.65)	(7.00)	(5.30)	(0.56)	(1.14)	(4.25)	
Sprucegrove WorldxUS LMCC	591	1.43	1.51	(11.35)	(15.26)	(20.33)	(23.31)	1.48	10.08	17.62	(13.67)	05/01/2013
NYC Developed Value Benchmark			4.25	(4.23)	(3.12)	(8.55)	(14.42)	1.29	7.43	22.49	(14.09)	05/01/2013
Excess			(2.74)	(7.12)	(12.14)	(11.77)	(8.89)	0.19	2.66	(4.87)	0.42	

Information Classification: Limited Access

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Rates of Return - Net Mgr

Periods Ending May 31, 2020

	Assets ($MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/19	FYE 6/30/18	CYE 12/31/19	CYE 12/31/18	Inception Date
Acadian WorldxUS SCC	229	0.55	5.67	0.10	(0.86)	(5.07)	(12.29)	(6.23)	12.35	21.82	(19.22)	05/01/2013
S&P EPAC Small Cap USD NET			6.95	(2.08)	(1.78)	(6.04)	(14.53)	(6.38)	11.27	23.71	(18.58)	05/01/2013
Excess			(1.27)	2.18	0.92	0.97	2.24	0.14	1.08	(1.89)	(0.65)	
Algert EAFE SCC	49	0.12	8.42	(1.72)	(0.17)	(5.41)	(13.81)					02/01/2019
MSCI EAFE SMALL CAP NET (DAILY)			7.13	(2.12)	(0.78)	(4.82)	(14.28)					02/01/2019
Excess			1.29	0.40	0.61	(0.59)	0.47					
Fidelity WorldxUS SCC	2	0.00						(6.75)	11.26		(18.22)	05/01/2013
S&P EPAC Small Cap USD NET			6.95					(6.38)	11.27	23.71	(18.58)	05/01/2013
Excess								(0.38)	(0.02)		0.36	
SSGA WorldxUS LMC NYC Custom IDX	447	1.08	4.26	(4.01)	(2.81)	(8.24)	(14.16)	1.43	7.24	22.75	(14.05)	02/01/2011
NYC Custom World ex US Index			4.25	(4.23)	(3.12)	(8.55)	(14.42)	1.29	7.04	22.49	(14.09)	02/01/2011
Excess			0.01	0.22	0.31	0.31	0.26	0.14	0.20	0.26	0.04	
SSGA WorldxUS SC Custom IDX	224	0.54	6.94	(2.17)	(0.15)	(4.49)	(14.17)	(5.98)	12.58	25.67	(17.97)	02/01/2014
World ex USA SC PASSIVE CUSTOM BM			7.01	(2.32)	(0.57)	(4.90)	(14.40)	(6.17)	12.58	25.41	(18.07)	02/01/2014
Excess			(0.07)	0.15	0.42	0.41	0.23	0.19	0.00	0.26	0.10	
POLICE-TOTAL INTL FOF	236	0.57	5.16	(2.63)	1.28	(4.59)	(11.36)	0.12	10.74	25.10	(15.05)	05/01/2017
MSCI ACWI ex USA IMI Net			3.63	(4.86)	(3.41)	(8.71)	(14.94)	0.26	7.75	21.63	(14.76)	05/01/2017
Excess			1.53	2.23	4.70	4.12	3.58	(0.14)	3.00	3.47	(0.29)	
Osmosis-EAFE ACV - FIS	16	0.04	5.50	(2.33)	(3.50)	(7.99)	(13.18)	(5.18)	9.73	17.87	(14.24)	05/01/2017
MSCI EAFE			4.35	(3.73)	(2.81)	(8.26)	(14.26)	1.08	6.84	22.01	(13.79)	05/01/2017
Excess			1.15	1.40	(0.69)	0.27	1.09	(6.26)	2.89	(4.15)	(0.45)	
Redwood-EAFE ACG - FIS	11	0.03	7.08	3.77	7.05	2.18	(4.61)			25.78		12/01/2018
MSCI EAFE + Canada Net Index			4.25	(4.23)	(3.12)	(8.55)	(14.42)			22.49		12/01/2018
Excess			2.83	8.00	10.16	10.74	9.81			3.29		
Martin-EAFE ACG - FIS	9	0.02	5.81	1.08	4.13	(1.61)	(6.19)					02/01/2019
MSCI EAFE			4.35	(3.73)	(2.81)	(8.26)	(14.26)					02/01/2019
Excess			1.46	4.81	6.94	6.65	8.07					
Metis-EAFE ACV - FIS	5	0.01	3.83	(9.92)	(10.26)	(14.22)	(22.70)	(7.97)	5.01	20.24	(19.02)	05/01/2017
MSCI EAFE			4.35	(3.73)	(2.81)	(8.26)	(14.26)	1.08	6.84	22.01	(13.79)	05/01/2017
Excess			(0.52)	(6.19)	(7.45)	(5.96)	(8.43)	(9.05)	(1.83)	(1.77)	(5.23)	
Dundas-EAFE ACG - FIS	19	0.05	4.45	2.95	11.44	3.67	(5.54)	5.29	11.75	29.89	(9.87)	05/01/2017
MSCI EAFE + Canada Net Index			4.25	(4.23)	(3.12)	(8.55)	(14.42)	1.29	7.04	22.49	(14.09)	05/01/2017
Excess			0.20	7.18	14.56	12.22	8.88	4.00	4.71	7.40	4.22	
Denali-EAFE ACV - FIS	9	0.02	2.19	(13.90)	(18.38)	(21.79)	(24.53)	0.11	6.17	11.77	(11.39)	05/01/2017
MSCI EAFE + Canada Net Index			4.25	(4.23)	(3.12)	(8.55)	(14.42)	1.29	7.04	22.49	(14.09)	05/01/2017
Excess			(2.06)	(9.68)	(15.27)	(13.24)	(10.11)	(1.18)	(0.87)	(10.72)	2.70	
Change Global-EM ACV - FIS	10	0.02	0.84	(14.78)	(19.63)	(23.44)	(26.78)	0.01	3.02	14.52	(16.24)	05/01/2017
MSCI EMERGING MARKETS			0.77	(6.95)	(4.39)	(10.00)	(15.96)	1.21	8.20	18.42	(14.57)	05/01/2017
Excess			0.07	(7.83)	(15.25)	(13.44)	(10.82)	(1.20)	(5.18)	(3.90)	(1.68)	
Aubrey-EM ACG - FIS	18	0.04	5.31	(2.11)	13.72	4.77	(2.82)	0.58	20.82	29.24	(16.69)	05/01/2017
MSCI EMERGING MARKETS			0.77	(6.95)	(4.39)	(10.00)	(15.96)	1.21	8.20	18.42	(14.57)	05/01/2017
Excess			4.54	4.83	18.11	14.77	13.15	(0.63)	12.62	10.81	(2.13)	
Ativo-EAFE ACG - FIS	16	0.04	4.59	(7.16)	(5.28)	(10.59)	(15.96)	2.07	10.44	22.80	(12.11)	05/01/2017
MSCI EAFE + Canada Net Index			4.25	(4.23)	(3.12)	(8.55)	(14.42)	1.29	7.04	22.49	(14.09)	05/01/2017
Excess			0.34	(2.93)	(2.16)	(2.04)	(1.54)	0.78	3.40	0.31	1.98	
Ativo-WorldxUS ACC - Leading Edge	25	0.06	3.71	(6.08)	(3.32)	(9.05)	(15.35)			24.20		12/01/2018
MSCI AC WORLD ex US (NET)			3.27	(4.99)	(3.43)	(8.92)	(14.85)			21.51		12/01/2018
Excess			0.44	(1.09)	0.11	(0.13)	(0.50)			2.69		

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Periods Ending May 31, 2020

	Assets ($MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/19	FYE 6/30/18	CYE 12/31/19	CYE 12/31/18	Inception Date
Blackcrane-WorldxUS ACC - Leading Edge	19	0.05	10.75	3.40	9.24	3.77	(7.08)	(9.31)	9.52	28.72	(23.36)	05/01/2017
MSCI ACWI ex USA IMI Net			3.63	(4.86)	(3.41)	(8.71)	(14.94)	0.26	7.75	21.63	(14.76)	05/01/2017
Excess			7.12	8.26	12.66	12.49	7.86	(9.57)	1.77	7.09	(8.61)	
Haven-WorldxUS LMCV - Leading Edge	21	0.05	3.83	(4.13)	0.02	(6.34)	(13.15)					02/01/2019
MSCI ACWI ex USA IMI Net			3.63	(4.86)	(3.41)	(8.71)	(14.94)					02/01/2019
Excess			0.20	0.73	3.44	2.37	1.80					
Henry James-WorldxUS LMCC - Leading Edge	29	0.07	5.55	(0.44)	5.18	(1.81)	(8.56)	2.93	10.87	28.41	(14.59)	05/01/2017
MSCI ACWI ex USA IMI Net			3.63	(4.86)	(3.41)	(8.71)	(14.94)	0.26	7.75	21.63	(14.76)	05/01/2017
Excess			1.91	4.42	8.59	6.90	6.39	2.67	3.13	6.78	0.16	
Redwood-WorldxUS LMCC - Leading Edge	29	0.07	5.85	1.11	8.06	1.70	(6.91)	4.23	17.33	34.03	(16.23)	05/01/2017
MSCI ACWI ex USA IMI Net			3.63	(4.86)	(3.41)	(8.71)	(14.94)	0.26	7.75	21.63	(14.76)	05/01/2017
Excess			2.22	5.97	11.47	10.41	8.03	3.97	9.58	12.40	(1.47)	
Leading Edge Transition WorldxUS	0	0.00										11/01/2017
POLICE-TOTAL EMERGING MARKETS	2,284	5.54	1.33	(8.42)	(8.05)	(13.29)	(18.27)	2.12	7.40	17.77	(14.74)	11/01/1996
MSCI EMERGING MARKETS			0.77	(6.95)	(4.39)	(10.00)	(15.96)	1.21	8.20	18.42	(14.57)	11/01/1996
Excess			0.57	(1.47)	(3.66)	(3.29)	(2.31)	0.92	(0.81)	(0.65)	(0.17)	
DFA EM	289	0.70	(0.26)	(11.44)	(18.45)	(22.28)	(23.95)	1.67	6.21	9.73	(12.06)	03/01/2007
MSCI EMERGING MARKETS			0.77	(6.95)	(4.39)	(10.00)	(15.96)	1.21	8.20	18.42	(14.57)	03/01/2007
Excess			(1.03)	(4.50)	(14.07)	(12.27)	(7.99)	0.47	(1.99)	(8.69)	2.50	
Baillie Gifford EM	404	0.98	3.36	(6.85)	(1.74)	(8.19)	(15.98)	7.98	11.90	28.50	(15.37)	11/01/2005
MSCI EMERGING MARKETS			0.77	(6.95)	(4.39)	(10.00)	(15.96)	1.21	8.20	18.42	(14.57)	11/01/2005
Excess			2.60	0.09	2.65	1.81	(0.02)	6.77	3.70	10.08	(0.80)	
Parametric EM	257	0.62	1.65	(11.92)	(15.12)	(19.17)	(22.26)	1.77	4.39	14.20	(14.33)	06/01/2012
MSCI EMERGING MARKETS			0.77	(6.95)	(4.39)	(10.00)	(15.96)	1.21	8.20	18.42	(14.57)	06/01/2012
Excess			0.89	(4.97)	(10.73)	(9.17)	(6.30)	0.56	(3.82)	(4.22)	0.24	
Pzena-EM ACV	156	0.38										05/01/2020
MSCI EMERGING MARKETS			0.77									05/01/2020
Excess												
UBS-EM ACC	249	0.60										05/01/2020
MSCI EMERGING MARKETS			0.77									05/01/2020
Excess												
Acadian EM	342	0.83	0.79	(7.98)	(6.80)	(12.68)	(17.61)	(1.42)	6.03	15.71	(17.27)	11/01/2005
MSCI EMERGING MARKETS			0.77	(6.95)	(4.39)	(10.00)	(15.96)	1.21	8.20	18.42	(14.57)	11/01/2005
Excess			0.02	(1.04)	(2.41)	(2.68)	(1.64)	(2.63)	(2.17)	(2.71)	(2.70)	
BlackRock MSCI EM Core	588	1.42	0.63	(7.29)	(4.62)	(10.19)	(16.20)	1.42	8.07	18.76	(14.44)	04/01/2011
MSCI EMERGING MARKETS			0.77	(6.95)	(4.39)	(10.00)	(15.96)	1.21	8.20	18.42	(14.57)	04/01/2011
Excess			(0.14)	(0.35)	(0.24)	(0.19)	(0.24)	0.21	(0.13)	0.34	0.13	
POLICE-TOTAL HEDGE FUNDS	2,888	7.00	2.19	9.21	10.32	7.88	8.02	3.91	8.50	4.69	2.38	07/01/2011
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)	2.16	6.23	9.47	(3.06)	07/01/2011
Excess			(0.22)	11.22	9.22	8.41	11.09	1.75	2.27	(4.77)	5.43	
FUND OF FUNDS HEDGE FUNDS	36	0.09						(0.88)	4.41	2.31	1.84	07/01/2011
HFRI Fund of Funds Composite Index + 1%			2.41					2.16	6.23	9.47	(3.06)	07/01/2011
Excess								(3.05)	(1.82)	(7.15)	4.90	
Altimeter Partners	54	0.13	7.92	(6.20)	(1.60)	(13.77)	(14.16)	31.35	6.49	21.40	18.20	03/01/2016
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)	2.16	6.23	9.47	(3.06)	03/01/2016
Excess			5.52	(4.20)	(2.69)	(13.23)	(11.09)	29.19	0.26	11.94	21.26	

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Brevan Howard AH Fund	365	0.88	0.00	131.47	112.07	89.21	127.25	(3.41)	34.39	(13.14)	27.06	05/01/2017
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)	2.16	6.23	9.47	(3.06)	05/01/2017
Excess			(2.41)	133.47	110.98	89.75	130.32	(5.57)	28.16	(22.61)	30.12	
CASPIAN SELECT CF	200	0.48	2.48	(7.55)	(5.49)	(6.28)	(7.79)	3.20	3.96	5.12	0.85	05/01/2012
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)	2.16	6.23	9.47	(3.06)	05/01/2012
Excess			0.08	(5.55)	(6.58)	(5.74)	(4.73)	1.03	(2.27)	(4.34)	3.91	
D.E. SHAW COMPOSITE FD	245	0.59	1.34	4.78	13.63	12.06	6.82	12.04	11.07	10.90	11.59	01/01/2012
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)	2.16	6.23	9.47	(3.06)	01/01/2012
Excess			(1.07)	6.78	12.53	12.60	9.89	9.88	4.84	1.44	14.65	
DL PARTNERS OPP LP	117	0.28	2.09	(2.71)	(2.15)	(3.15)	(2.62)			2.45		11/01/2018
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)			9.47		11/01/2018
Excess			(0.32)	(0.71)	(3.24)	(2.62)	0.45			(7.01)		
FIR TREE VAL FD	1	0.00						(11.89)	(0.53)	(57.01)	(3.45)	02/01/2013
HFRI Fund of Funds Composite Index + 1%			2.41					2.16	6.23	9.47	(3.06)	02/01/2013
Excess								(14.05)	(6.76)	(66.47)	(0.39)	
Florin Court Capital	120	0.29	(0.28)	0.89	11.33	5.08	1.06			15.35		08/01/2018
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)			9.47		08/01/2018
Excess			(2.69)	2.89	10.24	5.62	4.12			5.89		
Gotham Asset Management	35	0.09	(0.56)	(2.46)	(5.93)	(7.78)	(8.72)	(0.06)	2.02	0.46	(1.37)	02/01/2015
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)	2.16	6.23	9.47	(3.06)	02/01/2015
Excess			(2.97)	(0.45)	(7.02)	(7.24)	(5.66)	(2.22)	(4.21)	(9.01)	1.69	
GRESHAM QUANT ACAR FD	59	0.14	(0.71)	3.87		7.48	8.95					07/01/2019
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)		(0.54)	(3.07)					07/01/2019
Excess			(3.11)	5.88		8.02	12.02					
GSA Capital Partners LP	178	0.43	(2.68)	(0.18)	(0.24)	0.05	(0.04)	1.38	(0.44)	(0.97)	(6.51)	05/01/2017
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)	2.16	6.23	9.47	(3.06)	05/01/2017
Excess			(5.09)	1.82	(1.33)	0.59	3.03	(0.78)	(6.67)	(10.43)	(3.46)	
JEFFERIES STRC ALPHA B	71	0.17	1.98	(2.26)	(4.28)	(4.20)	(3.62)					03/01/2019
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)					03/01/2019
Excess			(0.43)	(0.25)	(5.37)	(3.66)	(0.56)					
KEY SQUARE GROUP LP	164	0.40	5.15	(9.58)	(18.27)	(17.15)	(11.19)	1.90	1.44	0.49	(1.93)	06/01/2017
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)	2.16	6.23	9.47	(3.06)	06/01/2017
Excess			2.74	(7.58)	(19.36)	(16.61)	(8.13)	(0.27)	(4.79)	(8.97)	1.12	
LANSDOWNE EURO ABS OPP	74	0.18	(5.27)	(4.14)	(16.70)	(15.69)	(12.50)					06/01/2019
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)					06/01/2019
Excess			(7.68)	(2.13)	(17.79)	(15.15)	(9.44)					
LUXOR CAPITAL	191	0.46	5.24	10.89	14.56	17.90	13.41	2.48	24.23	5.04	14.64	06/01/2014
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)	2.16	6.23	9.47	(3.06)	06/01/2014
Excess			2.84	12.89	13.47	18.44	16.48	0.32	18.00	(4.42)	17.70	
PERRY CAPITAL LP	2	0.00						(1.97)	(2.73)	21.10	(11.07)	06/01/2013
HFRI Fund of Funds Composite Index + 1%			2.41					2.16	6.23	9.47	(3.06)	06/01/2013
Excess								(4.13)	(8.97)	11.64	(8.01)	
Pharo Gaia Fund Ltd	186	0.45	4.94	(6.68)	2.29	(2.50)	(1.99)	17.36	2.59	9.58	0.15	12/01/2015
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)	2.16	6.23	9.47	(3.06)	12/01/2015
Excess			2.53	(4.68)	1.20	(1.96)	1.08	15.20	(3.64)	0.11	3.20	
PHARO MACRO FD	111	0.27	2.80	(4.27)	0.07	(2.91)	(0.35)	9.60	5.45	5.30	2.10	07/01/2013
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)	2.16	6.23	9.47	(3.06)	07/01/2013
Excess			0.39	(2.27)	(1.02)	(2.37)	2.72	7.43	(0.78)	(4.17)	5.16	

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	Assets ($MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/19	FYE 6/30/18	CYE 12/31/19	CYE 12/31/18	Inception Date
QUEST PARTNERS LLC	187	0.45	(4.40)	3.63	21.61	14.65	12.00	(9.82)	19.81	6.32	3.18	06/01/2017
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)	2.16	6.23	9.47	(3.06)	06/01/2017
Excess			(6.81)	5.64	20.52	15.19	15.07	(11.98)	13.58	(3.15)	6.23	
SRS Investment Management	151	0.37	2.60	(4.55)	5.62	2.92	(1.60)	8.22	15.50	13.74	4.90	01/01/2015
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)	2.16	6.23	9.47	(3.06)	01/01/2015
Excess			0.19	(2.55)	4.53	3.46	1.47	6.06	9.27	4.28	7.95	
STANDARD GENERAL	39	0.09	0.25	(12.60)	(26.87)	(25.11)	(17.42)	3.15	15.11	(3.74)	6.51	06/01/2014
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)	2.16	6.23	9.47	(3.06)	06/01/2014
Excess			(2.16)	(10.60)	(27.96)	(24.57)	(14.35)	0.98	8.88	(13.20)	9.56	
Turiya Capital Management	120	0.29	4.73	7.51	11.63	11.91	5.73	(1.48)	(7.16)	7.85	(21.01)	07/01/2015
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)	2.16	6.23	9.47	(3.06)	07/01/2015
Excess			2.32	9.51	10.54	12.45	8.80	(3.64)	(13.40)	(1.62)	(17.95)	
VOLORIDGE AGGRESSIVE	39	0.10	1.34	6.97	26.25	23.54	10.48					03/01/2019
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)					03/01/2019
Excess			(1.07)	8.98	25.16	24.07	13.55					
VOLORIDGE FUND	102	0.25	(0.59)	5.85	19.78	13.60	(1.10)					03/01/2019
HFRI Fund of Funds Composite Index + 1%			2.41	(2.00)	1.09	(0.54)	(3.07)					03/01/2019
Excess			(3.00)	7.85	18.69	14.14	1.97					
Voloridge Sustainability Fund Master	39	0.10	1.08									05/01/2020
HFRI Fund of Funds Composite Index + 1%			2.41									05/01/2020
Excess			(1.33)									
FIXED INCOME SUMMARY												
POLICE-TOTAL STRUCTURED	6,024	14.60	(0.47)	3.54	16.38	14.90	11.82	9.47	(0.23)	10.75	(0.89)	01/01/1985
NYC Custom Structured Index-Police			(0.81)	4.14	19.78	18.18	14.23	10.80	(0.11)	13.17	(1.29)	01/01/1985
Excess			0.34	(0.60)	(3.40)	(3.28)	(2.41)	(1.34)	(0.12)	(2.42)	0.39	
BlackRock Mortgages	816	1.98	0.39	1.79	6.79	5.80	3.60	6.67	0.08	6.89	0.97	09/01/2000
FTSE MORTGAGE INDEX			0.11	2.01	6.79	6.00	3.64	6.39	0.11	6.68	1.01	09/01/2000
Excess			0.29	(0.22)	0.00	(0.20)	(0.04)	0.29	(0.03)	0.21	(0.04)	
Neuberger Berman Mortgages	101	0.24	0.03	1.71	6.41	5.56	3.44	6.17	(0.09)	6.35	0.78	02/01/2010
FTSE MORTGAGE INDEX			0.11	2.01	6.79	6.00	3.64	6.39	0.11	6.68	1.01	02/01/2010
Excess			(0.08)	(0.29)	(0.38)	(0.44)	(0.21)	(0.22)	(0.20)	(0.33)	(0.23)	
T Rowe Price Credit	478	1.16	1.80	(1.85)	8.65	6.22	1.51	10.53	(0.79)	14.56	(2.39)	01/01/1987
NYC - Investment Grade Credit			1.79	(0.57)	9.47	7.25	3.09	10.13	(0.72)	13.40	(1.90)	01/01/1987
Excess			0.01	(1.28)	(0.82)	(1.04)	(1.58)	0.40	(0.08)	1.17	(0.48)	
BlackRock Credit	230	0.56	2.01	0.36	10.60	8.11	3.79	10.37	(0.46)	14.09	(1.96)	10/01/2000
NYC - Investment Grade Credit			1.79	(0.57)	9.47	7.25	3.09	10.13	(0.72)	13.40	(1.90)	10/01/2000
Excess			0.22	0.93	1.14	0.85	0.70	0.24	0.26	0.69	(0.05)	
Prudential Credit	274	0.66	1.88	(1.31)	9.11	6.84	2.48	10.27	(0.27)	13.91	(1.93)	08/01/2009
NYC - Investment Grade Credit			1.79	(0.57)	9.47	7.25	3.09	10.13	(0.72)	13.40	(1.90)	08/01/2009
Excess			0.09	(0.74)	(0.36)	(0.42)	(0.60)	0.15	0.45	0.51	(0.02)	
Taplin Credit	107	0.26	2.02	(0.55)	10.00	7.14	2.37	10.17	(0.17)	15.66	(3.47)	11/01/2002
NYC - Investment Grade Credit			1.79	(0.57)	9.47	7.25	3.09	10.13	(0.72)	13.40	(1.90)	11/01/2002
Excess			0.23	0.02	0.53	(0.11)	(0.72)	0.04	0.55	2.26	(1.56)	
Fidelity Credit	128	0.31	2.17	(1.07)	9.56	6.96	2.67	10.87	(0.49)	14.79	(2.26)	09/01/2009
NYC - Investment Grade Credit			1.79	(0.57)	9.47	7.25	3.09	10.13	(0.72)	13.40	(1.90)	09/01/2009
Excess			0.38	(0.50)	0.09	(0.30)	(0.41)	0.74	0.23	1.40	(0.35)	

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	Assets ($MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/19	FYE 6/30/18	CYE 12/31/19	CYE 12/31/18	Inception Date
SSGA LI Treasury	991	2.40	(0.80)	4.85	18.33	16.94	14.28	10.19	(0.78)	10.66	(0.21)	08/01/2009
NYC - Treasury Agency Plus Five			(0.74)	4.92	18.40	16.92	14.47	10.38	(0.96)	10.40	(0.05)	08/01/2009
Excess			(0.06)	(0.06)	(0.07)	0.02	(0.19)	(0.19)	0.18	0.26	(0.16)	
SSgA Int Gov Bond Index *	7	0.02	0.18	2.53	7.82	6.93	5.66	5.02	4.29	5.08	2.04	03/01/2017
FTSE USBIG Treasury/Agency 1-10 y			0.19	2.56	7.77	6.90	5.65	6.11	(0.71)	5.18	1.42	03/01/2017
Excess			(0.01)	(0.04)	0.04	0.03	0.02	(1.09)	5.00	(0.09)	0.62	
* Assets were in transition from 9/29/17 to 2/11/19												
BlackRock LI Treasury	936	2.27	(0.75)	4.61	17.83	16.41	13.90	10.29	(0.99)	10.49	(0.18)	08/01/2009
NYC - Treasury Agency Plus Five			(0.74)	4.92	18.40	16.92	14.47	10.38	(0.96)	10.40	(0.05)	08/01/2009
Excess			(0.02)	(0.30)	(0.57)	(0.51)	(0.57)	(0.09)	(0.04)	0.10	(0.13)	
SSGA 1-3 Treasury Index **	156	0.38	0.07	1.47	4.61	4.07	2.91	3.96	2.65	3.60	1.50	01/01/2017
FTSE USBIG Treasury 1-3 Y Index			0.07	1.48	4.56	4.03	2.91	3.95	0.06	3.56	1.56	01/01/2017
Excess			(0.01)	(0.01)	0.05	0.05	0.00	0.01	2.59	0.04	(0.06)	
** Assets were in transition from 9/29/17 to 11/30/17												
SSGA LT Treasury 10Y Plus	1,800	4.36	(2.01)	5.94	26.73	25.10	20.88	12.28	(0.05)	14.89	(1.84)	11/01/2016
FTSE Treasury 10+			(1.89)	6.08	26.95	25.28	21.07	12.24	(0.06)	14.89	(1.89)	11/01/2016
Excess			(0.13)	(0.15)	(0.22)	(0.18)	(0.19)	0.04	0.01	(0.01)	0.05	
POLICE-TOTAL CORE FI- EMERGING MGRS	0	0.00						7.85	0.07	8.88	(0.05)	06/01/2012
BBG BARC Agg (Dly)			0.47					7.87	(0.40)	8.72	0.01	06/01/2012
Excess								(0.02)	0.47	0.16	(0.06)	
Optimum Quantvest-Core - Progress	0	0.00						8.14	(1.00)	7.93	0.33	06/01/2012
BBG BARC Agg (Dly)			0.47					7.87	(0.40)	8.72	0.01	06/01/2012
Excess								0.27	(0.60)	(0.79)	0.32	
Integrity-Core - Progress	0	0.00						7.67	0.02	8.56	(0.03)	07/01/2016
BBG BARC Agg (Dly)			0.47					7.87	(0.40)	8.72	0.01	07/01/2016
Excess								(0.20)	0.41	(0.16)	(0.04)	
Ramirez-Core - Progress	0	0.00						8.06	0.87	9.67	0.07	08/01/2014
BBG BARC Agg (Dly)			0.47					7.87	(0.40)	8.72	0.01	08/01/2014
Excess								0.19	1.26	0.95	0.06	
New Century-Core Plus - Progress	0	0.00						7.80	0.13	8.52	0.12	06/01/2012
BBG BARC Agg (Dly)			0.47					7.87	(0.40)	8.72	0.01	06/01/2012
Excess								(0.07)	0.53	(0.19)	0.11	
Pugh-Core Plus - Progress	0	0.00						7.69	(0.28)	8.92	(0.42)	06/01/2012
BBG BARC Agg (Dly)			0.47					7.87	(0.40)	8.72	0.01	06/01/2012
Excess								(0.18)	0.12	0.21	(0.43)	
POLICE-TOTAL HIGH YIELD	2,133	5.17	4.36	(2.68)	2.04	(0.33)	(4.37)	7.07	1.64	14.63	(3.12)	10/01/1994
High Yield Custom Benchmark			4.37	(3.41)	1.31	(0.95)	(4.74)	7.48	2.42	14.32	(2.34)	10/01/1994
Excess			(0.01)	0.73	0.73	0.62	0.37	(0.41)	(0.78)	0.31	(0.78)	
Oaktree High Yield	224	0.54	4.66	(2.40)	2.06	(0.20)	(4.08)	6.66	0.77	13.99	(3.42)	02/01/2013
BBG BARC US HY - 2% Issr Cap			4.37	(3.41)	1.31	(0.95)	(4.74)	7.48	2.62	14.32	(2.08)	02/01/2013
Excess			0.29	1.00	0.75	0.75	0.66	(0.82)	(1.85)	(0.32)	(1.34)	
Neuberger Berman High Yield	309	0.75	4.72	(2.82)	1.71	(0.75)	(4.89)	7.31	1.76	14.18	(1.99)	09/01/2012
BBG BARC US HY - 2% Issr Cap			4.37	(3.41)	1.31	(0.95)	(4.74)	7.48	2.62	14.32	(2.08)	09/01/2012
Excess			0.35	0.59	0.40	0.20	(0.14)	(0.16)	(0.86)	(0.14)	0.09	
Stone Harbor High Yield	205	0.50	4.41	(1.63)	1.91	(0.66)	(3.60)	8.30	1.51	14.12	(2.63)	10/01/2012
BBG BARC US HY - 2% Issr Cap			4.37	(3.41)	1.31	(0.95)	(4.74)	7.48	2.62	14.32	(2.08)	10/01/2012
Excess			0.04	1.78	0.60	0.29	1.14	0.83	(1.11)	(0.20)	(0.54)	

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T Rowe Price High Yield	639	1.55	4.08	(2.31)	2.86	0.36	(4.09)	8.87	1.53	15.60	(2.36)	10/01/2003
BBG BARC US HY - 2% Issr Cap			4.37	(3.41)	1.31	(0.95)	(4.74)	7.48	2.62	14.32	(2.08)	10/01/2003
Excess			(0.29)	1.09	1.55	1.31	0.65	1.39	(1.10)	1.28	(0.28)	
Shenkman High Yield	313	0.76	4.21	(2.46)	2.50	0.22	(3.88)	3.22	2.51	14.29	(5.95)	10/01/2003
BBG BARC US HY - 2% Issr Cap			4.37	(3.41)	1.31	(0.95)	(4.74)	7.48	2.62	14.32	(2.08)	10/01/2003
Excess			(0.16)	0.95	1.19	1.16	0.87	(4.25)	(0.11)	(0.03)	(3.86)	
Brigade High Yield	101	0.25	4.23	(6.68)	(1.67)	(3.82)	(7.67)			15.23		12/01/2018
BBG BARC US HY - 2% Issr Cap			4.37	(3.41)	1.31	(0.95)	(4.74)			14.32		12/01/2018
Excess			(0.14)	(3.28)	(2.98)	(2.87)	(2.93)			0.91		
Eaton Vance High Yield	106	0.26	4.04	(3.31)	1.53	(0.76)	(4.86)			14.62		12/01/2018
BBG BARC US HY - 2% Issr Cap			4.37	(3.41)	1.31	(0.95)	(4.74)			14.32		12/01/2018
Excess			(0.33)	0.10	0.22	0.19	(0.12)			0.30		
Mackay Shields High Yield	130	0.31	4.44	(1.52)	3.33	1.27	(2.88)			14.40		12/01/2018
BBG BARC US HY - 2% Issr Cap			4.37	(3.41)	1.31	(0.95)	(4.74)			14.32		12/01/2018
Excess			0.07	1.88	2.03	2.21	1.86			0.08		
Nomura High Yield	105	0.25	5.13	(4.43)	(0.34)	(2.46)	(6.09)			13.89		12/01/2018
BBG BARC US HY - 2% Issr Cap			4.37	(3.41)	1.31	(0.95)	(4.74)			14.32		12/01/2018
Excess			0.77	(1.03)	(1.65)	(1.51)	(1.35)			(0.43)		
Transition High Yield	0	0.00										09/01/1994
POLICE-TOTAL BANK LOANS	652	1.58	3.20	(4.28)	(2.24)	(2.44)	(5.38)	3.49	4.59	8.02	0.82	12/01/2012
CSFB LEVERAGED LOAN INDEX			3.80	(5.24)	(3.35)	(3.57)	(6.02)	4.15	4.67	8.17	1.14	12/01/2012
Excess			(0.60)	0.96	1.12	1.13	0.64	(0.66)	(0.08)	(0.16)	(0.32)	
Barings Bank Loans	251	0.61	2.99	(5.10)	(3.71)	(3.74)	(6.48)	2.98	4.85	7.82	0.38	12/01/2012
CSFB LEVERAGED LOAN INDEX			3.80	(5.24)	(3.35)	(3.57)	(6.02)	4.15	4.67	8.17	1.14	12/01/2012
Excess			(0.81)	0.13	(0.36)	(0.18)	(0.45)	(1.17)	0.18	(0.36)	(0.76)	
Credit Suisse Bank Loans	268	0.65	3.15	(4.08)	(1.70)	(1.88)	(4.90)	3.93	4.49	8.31	1.04	02/01/2013
CSFB LEVERAGED LOAN INDEX			3.80	(5.24)	(3.35)	(3.57)	(6.02)	4.15	4.67	8.17	1.14	02/01/2013
Excess			(0.65)	1.16	1.66	1.69	1.12	(0.22)	(0.18)	0.13	(0.10)	
Guggenheim Bank Loans	2	0.01							4.26		1.24	03/01/2013
CSFB LEVERAGED LOAN INDEX			3.80					4.15	4.67	8.17	1.14	03/01/2013
Excess									(0.41)		0.10	
Pinebridge Bank Loans	131	0.32	3.76	(3.14)		(1.09)	(4.32)					07/01/2019
CSFB LEVERAGED LOAN INDEX			3.80	(5.24)		(3.57)	(6.02)					07/01/2019
Excess			(0.04)	2.10		2.47	1.71					
POLICE-TOTAL TIPS MANAGERS	1,807	4.38	0.23	1.40	8.10	7.23	4.99	4.82	2.18	8.44	(1.27)	06/01/2005
BBG BARC Gbl Inf-Lk: US TIPS (Dly)			0.30	1.28	8.00	7.08	4.84	4.84	2.11	8.43	(1.26)	06/01/2005
Excess			(0.07)	0.12	0.09	0.15	0.16	(0.02)	0.07	0.01	0.00	
SSGA TIPS	1,316	3.19	0.23	1.41	8.11	7.24	5.00	4.82	2.16	8.44	(1.30)	08/01/2005
BBG BARC Gbl Inf-Lk: US TIPS (Dly)			0.30	1.28	8.00	7.08	4.84	4.84	2.11	8.43	(1.26)	08/01/2005
Excess			(0.07)	0.13	0.10	0.15	0.17	(0.01)	0.05	0.02	(0.03)	
BlackRock TIPS	490	1.19	0.21	1.33	8.04	7.19	4.95	4.79	2.21	8.43	(1.18)	11/01/2005
BBG BARC Gbl Inf-Lk: US TIPS (Dly)			0.30	1.28	8.00	7.08	4.84	4.84	2.11	8.43	(1.26)	11/01/2005
Excess			(0.09)	0.06	0.04	0.11	0.11	(0.04)	0.10	0.00	0.09	
POLICE-TOTAL CONVERTIBLE BONDS	802	1.94	3.02	(1.60)	6.16	2.71	(3.81)	6.85	8.32	16.94	(0.55)	07/01/2008
ICE BofA All US Conv Ex Mandatory			7.15	2.71	16.78	11.66	3.94	8.00	13.41	22.89	0.65	07/01/2008
Excess			(4.12)	(4.32)	(10.62)	(8.95)	(7.75)	(1.15)	(5.08)	(5.95)	(1.19)	

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	Assets ($MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/19	FYE 6/30/18	CYE 12/31/19	CYE 12/31/18	Inception Date
Advent Convertible Bonds	364	0.88	3.34	(1.43)	4.85	2.19	(1.76)	5.18	3.87	12.79	(1.92)	07/01/2008
ICE BofA US Convertibles - Yield Alter			2.73	(6.03)	3.03	0.39	(5.45)	4.57	6.58	15.40	(0.42)	07/01/2008
Excess			0.61	4.60	1.82	1.81	3.69	0.60	(2.71)	(2.61)	(1.50)	
Victory Convertible Bonds	438	1.06	2.76	(1.75)	7.27	3.14	(5.45)	8.29	12.50	20.49	0.66	07/01/2008
ICE BofA All IG US Convertibles			1.84	(4.92)	5.47	1.22	(6.72)	10.51	14.84	20.88	3.35	07/01/2008
Excess			0.92	3.18	1.80	1.92	1.26	(2.22)	(2.34)	(0.39)	(2.69)	
POLICE-TOTAL CORE FI- DEVELOPING MGRS	189	0.46	1.94	1.15	8.86	7.31	4.52	7.75	(0.72)	9.79	(1.19)	05/01/2009
BBG BARC Agg (Dly)			0.47	1.65	9.42	8.06	5.47	7.87	(0.40)	8.72	0.01	05/01/2009
Excess			1.47	(0.50)	(0.56)	(0.74)	(0.95)	(0.12)	(0.33)	1.08	(1.20)	
LM Capital-Core Plus	71	0.17	1.03	0.61	8.36	6.86	4.12	7.83	(0.96)	9.75	(1.40)	05/01/2009
BBG BARC Agg (Dly)			0.47	1.65	9.42	8.06	5.47	7.87	(0.40)	8.72	0.01	05/01/2009
Excess			0.56	(1.04)	(1.06)	(1.19)	(1.35)	(0.03)	(0.56)	1.03	(1.41)	
Pugh-CorePlus	46	0.11										05/01/2020
BBG BARC Agg (Dly)			0.47									05/01/2020
Excess												
GIA-Core Plus	72	0.17	1.24	0.16	7.71	6.14	3.33	7.67	(0.50)	9.84	(0.98)	07/01/2015
BBG BARC Agg (Dly)			0.47	1.65	9.42	8.06	5.47	7.87	(0.40)	8.72	0.01	07/01/2015
Excess			0.77	(1.49)	(1.71)	(1.92)	(2.14)	(0.20)	(0.10)	1.12	(1.00)	
POLICE-TOTAL OPPORTUNISTIC FIXED	1,484	3.60	(2.08)	(6.40)	(2.90)	(2.91)	(5.13)	5.15	6.99	5.29	6.23	10/01/2007
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59	(4.75)	0.75	(0.78)	(5.41)	9.26	6.72	14.66	2.36	10/01/2007
Excess			(6.67)	(1.66)	(3.65)	(2.13)	0.28	(4.11)	0.27	(9.37)	3.87	
Avenue Special Situations Fund VI L.P.	3	0.01	(2.83)	(4.31)	(2.71)	(2.71)	(4.31)	(0.54)	12.40	(0.31)	12.41	08/01/2011
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59	(4.75)	0.75	(0.78)	(5.41)	9.26	6.72	14.66	2.36	08/01/2011
Excess			(7.42)	0.44	(3.46)	(1.92)	1.10	(9.80)	5.68	(14.97)	10.05	
Brightwood Capital Advisors III, LP	12	0.03	(6.61)	(5.92)	(8.74)	(8.74)	(5.92)	11.37	12.82	2.92	11.00	04/01/2015
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59	(4.75)	0.75	(0.78)	(5.41)	9.26	6.72	14.66	2.36	04/01/2015
Excess			(11.19)	(1.18)	(9.49)	(7.96)	(0.51)	2.11	6.09	(11.74)	8.64	
Brightwood Capital Advisors FD IV, LP	44	0.11	(7.95)	(7.56)	(7.97)	(7.97)	(7.56)	6.27	13.47	3.77	6.94	11/01/2016
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59	(4.75)	0.75	(0.78)	(5.41)	9.26	6.72	14.66	2.36	11/01/2016
Excess			(12.54)	(2.82)	(8.73)	(7.19)	(2.15)	(2.99)	6.74	(10.90)	4.58	
Fortress Ctr St Ptnrs	88	0.21	(11.25)	(9.86)	(5.36)	(5.36)	(9.85)	7.94	11.01	8.55	10.66	05/01/2012
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59	(4.75)	0.75	(0.78)	(5.41)	9.26	6.72	14.66	2.36	05/01/2012
Excess			(15.84)	(5.11)	(6.11)	(4.57)	(4.45)	(1.32)	4.28	(6.11)	8.30	
ICG Centre St Partner	48	0.12	2.09	2.09	7.73	7.73	2.09	11.64	3.85	11.66	9.02	07/01/2017
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59	(4.75)	0.75	(0.78)	(5.41)	9.26	6.72	14.66	2.36	07/01/2017
Excess			(2.49)	6.84	6.98	8.52	7.50	2.38	(2.87)	(3.00)	6.66	
Lone Star Fd VIII	16	0.04	(21.75)	(21.75)	(23.87)	(23.87)	(22.58)	(0.88)	(4.82)	(4.95)	3.61	11/01/2013
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59	(4.75)	0.75	(0.78)	(5.41)	9.26	6.72	14.66	2.36	11/01/2013
Excess			(26.34)	(17.00)	(24.62)	(23.08)	(17.17)	(10.14)	(11.54)	(19.61)	1.25	
Oaktree Opp Fd IX	40	0.10	0.00	(22.11)	(16.38)	(16.38)	(18.81)	8.60	7.97	7.21	4.57	04/01/2013
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59	(4.75)	0.75	(0.78)	(5.41)	9.26	6.72	14.66	2.36	04/01/2013
Excess			(4.59)	(17.36)	(17.13)	(15.60)	(13.40)	(0.66)	1.25	(7.45)	2.21	
Torchlight Debt Oppy Fund III, LLC	0	0.00										07/01/2009
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59					9.26	6.72	14.66	2.36	07/01/2009
Excess												
Torchlight Debt Opp V	12	0.03	(7.95)	(7.75)	1.38	1.06	(3.30)	7.72	15.00	6.55	14.55	08/01/2015
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59	(4.75)	0.75	(0.78)	(5.41)	9.26	6.72	14.66	2.36	08/01/2015
Excess			(12.53)	(3.00)	0.62	1.85	2.11	(1.54)	8.28	(8.12)	12.19	

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TORCHLIGHT DEBT OPP VI	50	0.12	(3.22)	(2.87)	2.21	2.21	(0.11)					06/01/2019
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59	(4.75)	0.75	(0.78)	(5.41)					06/01/2019
Excess			(7.80)	1.88	1.46	3.00	5.30					
Angelo Gordon Ct St Ptnrs	103	0.25	1.83	(7.30)	(6.00)	(4.31)	(8.07)	(0.74)	3.44	0.10	7.97	08/01/2012
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59	(4.75)	0.75	(0.78)	(5.41)	9.26	6.72	14.66	2.36	08/01/2012
Excess			(2.75)	(2.55)	(6.75)	(3.52)	(2.66)	(10.00)	(3.28)	(14.57)	5.61	
Apollo Centre Street Partnership, L.P	204	0.49	1.71	(0.38)	5.29	5.12	0.44	5.49	9.14	6.70	8.32	05/01/2012
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59	(4.75)	0.75	(0.78)	(5.41)	9.26	6.72	14.66	2.36	05/01/2012
Excess			(2.88)	4.36	4.54	5.90	5.85	(3.77)	2.41	(7.96)	5.96	
Ares Centre Street	126	0.31	(4.46)	(2.74)	2.25	1.50	(2.26)	9.06	10.12	8.59	9.71	01/01/2015
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59	(4.75)	0.75	(0.78)	(5.41)	9.26	6.72	14.66	2.36	01/01/2015
Excess			(9.05)	2.01	1.50	2.28	3.15	(0.20)	3.39	(6.07)	7.35	
Contrarian Partnership, L.P	47	0.11	(0.74)	(16.50)	(18.98)	(17.54)	(15.22)	(14.95)	7.53	(8.48)	(4.51)	07/01/2013
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59	(4.75)	0.75	(0.78)	(5.41)	9.26	6.72	14.66	2.36	07/01/2013
Excess			(5.33)	(11.75)	(19.73)	(16.75)	(9.81)	(24.21)	0.81	(23.15)	(6.87)	
FCO MA Centre Street II ER	50	0.12	4.22	2.81			2.81					01/01/2020
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59	(4.75)			(5.41)					01/01/2020
Excess			(0.36)	7.56			8.22					
Golden Tree OD	136	0.33	3.47	(4.78)	(0.58)	(2.10)	(5.75)	5.29	3.29	11.60	(1.71)	01/01/2012
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59	(4.75)	0.75	(0.78)	(5.41)	9.26	6.72	14.66	2.36	01/01/2012
Excess			(1.11)	(0.03)	(1.33)	(1.32)	(0.34)	(3.97)	(3.43)	(3.06)	(4.08)	
KKR NYC CREDIT A & B	112	0.27	0.00	(2.23)	6.46	6.46	2.93	9.41		2.77	26.50	12/01/2017
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59	(4.75)	0.75	(0.78)	(5.41)	9.26		14.66	2.36	12/01/2017
Excess			(4.59)	2.51	5.71	7.25	8.34	0.15		(11.90)	24.14	
Maranon Partnership	53	0.13	0.74	(5.35)	0.73	0.04	(3.78)			7.72		09/01/2018
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59	(4.75)	0.75	(0.78)	(5.41)			14.66		09/01/2018
Excess			(3.85)	(0.60)	(0.02)	0.83	1.63			(6.94)		
Marathon Centre Street Partnership, L.P.	185	0.45	(10.04)	(8.53)	(9.29)	(9.01)	(6.62)	6.78	1.71	2.19	4.09	01/01/2012
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59	(4.75)	0.75	(0.78)	(5.41)	9.26	6.72	14.66	2.36	01/01/2012
Excess			(14.62)	(3.78)	(10.04)	(8.22)	(1.21)	(2.48)	(5.02)	(12.48)	1.73	
Oak Hill Ctr St Ptnrs	155	0.38	3.16	(10.79)	(5.68)	(5.73)	(8.06)	6.57	10.44	6.70	7.72	10/01/2012
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			4.59	(4.75)	0.75	(0.78)	(5.41)	9.26	6.72	14.66	2.36	10/01/2012
Excess			(1.42)	(6.04)	(6.43)	(4.94)	(2.65)	(2.69)	3.72	(7.97)	5.36	
TOTAL POLICE ETI (w/o cash)	451	1.09	0.73	1.62	8.95	7.78	5.58	9.31	(0.94)	8.67	0.82	12/01/1984
Police Custom Benchmark (No Cash)			0.29	2.00	8.19	7.13	4.65	7.19	0.21	7.60	0.96	12/01/1984
Excess			0.44	(0.38)	0.76	0.65	0.93	2.12	(1.15)	1.07	(0.15)	
AFL-CIO Housing Investment Trust	179	0.43	0.30	1.10	7.70	6.51	4.77	7.90	(0.59)	7.78	0.16	10/01/2002
BBG BARC Agg (Dly)			0.47	1.65	9.42	8.06	5.47	7.87	(0.40)	8.72	0.01	10/01/2002
Excess			(0.16)	(0.55)	(1.71)	(1.55)	(0.70)	0.03	(0.20)	(0.94)	0.15	
RBC Access MBS	91	0.22	0.33	1.78	8.33	7.36	5.00	6.83	(0.37)	7.21	0.49	03/01/2007
Access RBC Benchmark			0.16	2.21	7.25	6.35	4.51	6.27	(0.12)	6.05	1.17	03/01/2007
Excess			0.17	(0.42)	1.08	1.01	0.49	0.55	(0.25)	1.16	(0.69)	
CPC Construction Facility	6	0.01	0.24	0.25	3.48	3.33	0.15	4.21	5.43	5.36	4.14	08/01/2014
CPC CONST BENCHMARK			0.20	0.69	3.57	3.22	1.28	4.23	3.66	4.09	3.99	08/01/2014
Excess			0.04	(0.44)	(0.09)	0.11	(1.13)	(0.02)	1.78	1.27	0.15	
BOA PPAR GNMA	6	0.02	1.10	2.62	8.54	7.42	6.27	11.37	(1.23)	8.44	2.42	02/01/2011
GNMA Plus 65bps			0.04	2.50	6.96	6.10	3.88	6.90	0.66	6.73	1.63	02/01/2011
Excess			1.05	0.12	1.58	1.32	2.39	4.46	(1.89)	1.70	0.79	

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BOA PPAR FNMA	7	0.02	1.47	1.24	12.45	11.34	7.13	13.51	(1.09)	13.54	2.33	12/01/2013
FNMA Plus 85bps			0.27	2.10	7.98	7.11	4.06	7.26	1.04	7.80	1.86	12/01/2013
Excess			1.21	(0.87)	4.48	4.23	3.07	6.25	(2.13)	5.74	0.47	
CFSB PPAR GNMA	1	0.00	1.08	2.73	7.56	6.49	6.14	9.78	(2.62)	5.91	0.99	10/01/2006
GNMA Plus 65bps			0.04	2.50	6.96	6.10	3.88	6.90	0.66	6.73	1.63	10/01/2006
Excess			1.04	0.22	0.60	0.39	2.26	2.87	(3.28)	(0.82)	(0.65)	
Citibank PPAR GNMA	3	0.01	1.14	2.84	7.61	6.48	6.47	10.12	(2.20)	5.33	1.90	12/01/2006
GNMA Plus 65bps			0.04	2.50	6.96	6.10	3.88	6.90	0.66	6.73	1.63	12/01/2006
Excess			1.10	0.34	0.65	0.38	2.59	3.21	(2.86)	(1.41)	0.27	
Citibank PPAR FNMA	7	0.02	2.31	1.93	18.97	17.81	8.00	15.16	(0.83)	19.71	2.63	12/01/2013
FNMA Plus 85bps			0.27	2.10	7.98	7.11	4.06	7.26	1.04	7.80	1.86	12/01/2013
Excess			2.04	(0.17)	11.00	10.70	3.94	7.90	(1.86)	11.91	0.77	
CPC PPAR FNMA	59	0.14	1.40	1.48	11.39	10.12	6.97	14.84	(0.39)	13.18	2.31	08/01/2013
FNMA Plus 85bps			0.27	2.10	7.98	7.11	4.06	7.26	1.04	7.80	1.86	08/01/2013
Excess			1.14	(0.62)	3.42	3.01	2.91	7.58	(1.43)	5.38	0.45	
POLICE-CPC PPAR GNMA	51	0.12	1.06	2.74	7.22	6.14	6.11	8.98	(3.24)	4.95	0.63	12/01/1984
GNMA Plus 65bps			0.04	2.50	6.96	6.10	3.88	6.90	0.66	6.73	1.63	12/01/1984
Excess			1.02	0.24	0.25	0.04	2.23	2.08	(3.89)	(1.78)	(1.00)	
JPMC PPAR FNMA	28	0.07	1.96	2.59	14.96	12.89	8.54	14.75	(1.18)	14.68	1.68	09/01/2013
FNMA Plus 85bps			0.27	2.10	7.98	7.11	4.06	7.26	1.04	7.80	1.86	09/01/2013
Excess			1.69	0.49	6.98	5.78	4.48	7.50	(2.21)	6.88	(0.18)	
LIIF PPAR GNMA	1	0.00	0.75	2.25	6.76	5.87	4.69	8.01	(0.63)	5.54	2.53	08/01/2009
GNMA Plus 65bps			0.04	2.50	6.96	6.10	3.88	6.90	0.66	6.73	1.63	08/01/2009
Excess			0.71	(0.26)	(0.20)	(0.23)	0.81	1.11	(1.28)	(1.19)	0.89	
LIIF PPAR FNMA	8	0.02	1.52	1.23	15.35	14.21	7.25	14.40	(1.35)	16.35	2.27	11/01/2013
FNMA Plus 85bps			0.27	2.10	7.98	7.11	4.06	7.26	1.04	7.80	1.86	11/01/2013
Excess			1.25	(0.87)	7.37	7.10	3.19	7.15	(2.39)	8.55	0.41	
LISC PPAR FNMA	1	0.00	1.63	0.61	18.01	16.96	11.71			14.95		11/01/2018
FNMA Plus 85bps			0.27	2.10	7.98	7.11	4.06			7.80		11/01/2018
Excess			1.36	(1.49)	10.03	9.85	7.65			7.15		
NCBCI PPAR GNMA	1	0.00	0.99	2.84	6.73	5.59	5.81	8.09	(2.27)	3.69	1.23	08/01/2009
GNMA Plus 65bps			0.04	2.50	6.96	6.10	3.88	6.90	0.66	6.73	1.63	08/01/2009
Excess			0.94	0.34	(0.23)	(0.51)	1.93	1.19	(2.93)	(3.04)	(0.41)	
NCBCI PPAR FNMA	0	0.00	1.02	2.90	8.26	7.13	6.12	8.27	(1.43)	4.08	2.00	11/01/2013
FNMA Plus 85bps			0.27	2.10	7.98	7.11	4.06	7.26	1.04	7.80	1.86	11/01/2013
Excess			0.75	0.80	0.29	0.02	2.06	1.02	(2.47)	(3.72)	0.15	
NHS PPAR GNMA	0	0.00	(1.63)	0.22	3.24	2.17	3.02	7.31	(2.40)	2.90	0.54	10/01/2007
GNMA Plus 65bps			0.04	2.50	6.96	6.10	3.88	6.90	0.66	6.73	1.63	10/01/2007
Excess			(1.67)	(2.28)	(3.73)	(3.93)	(0.86)	0.41	(3.06)	(3.84)	(1.09)	
Wells Fargo PPAR FNMA	1	0.00	1.65	0.76	13.07	12.07	7.15	23.19		21.71		01/01/2017
FNMA Plus 85bps			0.27	2.10	7.98	7.11	4.06	7.26	1.04	7.80	1.86	01/01/2017
Excess			1.38	(1.34)	5.09	4.95	3.09	15.93		13.91		
POLICE-TOTAL CASH	690	1.67	0.01	0.43	4.20	3.93	1.93	2.82	1.84	3.55	2.28	04/01/2004
ICE BofA US 3-Month Treasury Bill			0.00	0.30	1.84	1.62	0.58	2.31	1.36	2.28	1.87	04/01/2004
Excess			0.01	0.12	2.36	2.32	1.35	0.51	0.48	1.27	0.40	
Short Term POLICE	690	1.67	0.01	0.23	1.72	1.49	0.49	2.34	1.53	2.25	1.96	04/01/1982
ICE BofA US 3-Month Treasury Bill			0.00	0.30	1.84	1.62	0.58	2.31	1.36	2.28	1.87	04/01/1982
Excess			0.01	(0.07)	(0.12)	(0.12)	(0.09)	0.03	0.17	(0.04)	0.08	

New York City Police Pension Fund

Manager / Benchmark Comparison Report

Rates of Return - Net Mgr

Periods Ending May 31, 2020

	Assets ($MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/19	FYE 6/30/18	CYE 12/31/19	CYE 12/31/18	Inception Date
Cash Account	0	0.00	10.09	1,139.63	16,026,708.89	3,578,113.53	40,896.06	100,467.21	957,860.09	461,031.24	60,452.63	04/01/2004
KKR Cash Account												
Securities Lending	1	0.00										04/01/2004
POLICE-TOTAL PRIVATE EQUITY	2,518	6.10	(6.94)	(6.54)	1.79	1.27	(5.27)	13.16	19.50	10.72	17.96	04/01/2004
POLICE-TOTAL PRIVATE REAL ESTATE	2,180	5.28	(1.15)	(2.56)	2.81	2.45	(0.74)	7.93	12.20	6.51	10.58	04/01/2004
POLICE-TOTAL INFRASTRUCTURE	503	1.22	(1.89)	(4.68)	3.96	3.50	(2.94)	12.11	16.43	12.51	14.61	12/01/2013

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New York City Police Pension Fund, Subchapter 2
Private Equity Portfolio
As of December 31, 2019 (in USD)

Vintage Year	Investment	First Drawdown	Committed Capital	Contributed Capital	Distributed Capital	Market Value	Multiple	IRR[1]	PME Benchmark[2]	PME Spread[3]
Active Investments										
1999	Cypress Merchant Banking Partners II, L.P.	3/29/1999	$ 45,172,972	$ 53,944,269	$ 50,584,154	$ 24,183	0.94x	(1.2%)	5.5%	(6.7%)
1999	Lincolnshire Equity Fund II, L.P.	10/20/1999	11,038,409	11,556,880	22,613,645	243,195	1.98x	24.6%	7.0%	17.6%
2000	Solera Partners, L.P.	5/26/2000	9,999,888	13,369,506	20,817,577	81,194	1.56x	7.4%	6.1%	1.3%
2000	SCP Private Equity Partners II, L.P.	6/15/2000	25,000,000	28,057,160	10,857,159	2,717,892	0.48x	(8.1%)	5.8%	(13.9%)
2001	Apollo Investment Fund V, L.P.	4/13/2001	35,000,000	54,551,027	107,618,495	304,021	1.98x	38.8%	8.3%	30.4%
2001	CVC European Equity Partners III, L.P.	9/4/2001	25,000,000	29,700,915	74,439,614	1,699,553	2.56x	41.0%	10.9%	30.2%
2002	Landmark Equity Partners XI, L.P.	10/23/2002	30,000,000	28,518,970	43,831,911	72,023	1.54x	23.3%	7.5%	15.8%
2003	FS Equity Partners V, L.P.	1/20/2003	15,000,000	12,851,976	25,116,883	1,312,080	2.06x	15.4%	5.1%	10.3%
2003	Blackstone Capital Partners IV, L.P.	2/26/2003	46,253,267	57,243,283	139,513,063	1,236,804	2.46x	36.3%	8.5%	27.8%
2003	Ares Corporate Opportunities Fund, L.P.	4/1/2003	35,000,000	41,988,154	62,593,160	582,383	1.50x	13.2%	7.4%	5.7%
2004	Markstone Capital Partners, LP	1/30/2004	10,000,000	11,724,772	4,955,651	68,054	0.43x	(39.5%)	10.3%	(49.8%)
2004	FdG Capital Partners II LP	8/30/2004	25,000,000	26,938,873	31,142,933	1,461,999	1.21x	3.7%	6.7%	(3.1%)
2004	Lincolnshire Equity Fund III, L.P.	10/1/2004	15,000,000	15,001,893	21,212,913	5,743,365	1.80x	28.1%	11.6%	16.6%
2004	Yucaipa American Alliance Fund I, LP	10/1/2004	20,000,000	29,967,488	35,202,784	1,420,123	1.22x	4.7%	10.6%	(6.0%)
2004	Medica III Investments (International) L.P.	12/1/2004	10,000,000	10,000,000	4,237,089	2,406,000	0.66x	(7.5%)	(5.2%)	(2.3%)
2005	Palladium Equity Partners III, L.P.	11/12/2004	25,000,000	27,049,705	48,491,817	1,447,724	1.85x	14.4%	11.0%	3.4%
2005	New Mountain Partners II, L.P.	1/12/2005	7,741,935	7,011,896	13,507,602	83,059	1.94x	13.6%	4.4%	9.2%
2005	Carlyle Partners IV, L.P.	4/29/2005	50,000,000	51,537,550	100,903,803	1,293,570	1.98x	13.0%	4.1%	8.9%
2005	Arlington Capital Partners II, L.P.	7/29/2005	20,000,000	20,236,733	35,601,071	45,078	1.76x	11.3%	6.7%	4.6%
2005	Snow Phipps Group, L.P.	9/7/2005	10,000,000	11,913,742	10,457,308	4,382,051	1.25x	4.8%	11.2%	(6.4%)
2005	Blackstone Mezzanine Partners II, L.P.	10/10/2005	11,954,147	13,356,475	17,778,894	159,467	1.34x	7.8%	3.7%	4.1%
2005	Psilos Group Partners III, L.P.	10/24/2005	12,500,000	13,287,792	6,410,270	11,761,489	1.37x	4.3%	8.3%	(4.0%)
2005	FirstMark Capital I, L.P. (fka FirstMark IV)	11/21/2005	10,000,000	10,927,097	37,049,724	30,652,592	6.20x	32.1%	10.8%	21.3%
2005	USPF II Institutional Fund, L.P.	11/23/2005	20,000,000	26,379,750	30,753,066	2,802,217	1.27x	4.0%	7.8%	(3.7%)
2005	JP Morgan Fleming (Tranche A)	12/21/2005	40,000,000	39,978,833	40,332,416	10,785,102	1.28x	4.6%	10.8%	(6.2%)
2006	Aisling Capital II, LP	1/12/2006	2,500,000	2,945,044	2,852,895	127,276	1.01x	0.2%	7.7%	(7.5%)
2006	InterMedia Partners VII, L.P.	1/20/2006	12,500,000	14,599,097	14,795,867	(15,513)	1.01x	0.2%	9.7%	(9.5%)
2006	Falconhead Capital Partners II, L.P.	1/24/2006	15,000,000	16,846,651	16,818,185	3,470,998	1.20x	3.5%	8.8%	(5.2%)
2006	Terra Firma Capital Partners III, L.P.	3/8/2006	15,529,017	15,742,445	6,102,718	1,218,058	0.47x	(9.1%)	9.9%	(19.0%)
2006	Blackstone Capital Partners V, L.P.	4/13/2006	42,087,697	44,813,712	71,189,966	1,543,177	0.39x	(20.8%)	8.4%	(29.2%)
2006	Avista Capital Partners, L.P.	4/27/2006	20,000,000	26,295,958	32,016,285	325,243	1.23x	4.4%	6.3%	(1.9%)
2006	Apollo Investment Fund VI, L.P.	5/10/2006	45,000,000	57,919,123	86,669,134	910,633	1.51x	8.7%	7.6%	1.1%
2006	Landmark Equity Partners XIII, L.P.	5/11/2006	10,000,000	9,611,868	10,450,828	2,372,335	1.33x	5.5%	6.7%	(1.2%)
2006	Ares Corporate Opportunities Fund II, L.P.	5/23/2006	15,000,000	16,428,261	27,406,387	25,925	1.67x	13.1%	3.8%	9.3%
2006	Atlantic Equity Partners IV, L.P.	7/12/2006	25,124,928	24,311,807	4,274,904	14,062,568	0.75x	(3.2%)	9.8%	(13.0%)
2006	Capital Partners Private Equity Income Fund, L.P.	8/23/2006	15,000,000	14,476,277	33,181,704	340,121	2.32x	21.1%	11.1%	10.0%
2006	NB Co-Investment Partners LP	9/28/2006	60,000,000	60,616,170	85,745,060	4,101,557	1.48x	8.9%	5.9%	3.0%
2006	Euro Choice III L.P.	11/21/2006	26,710,165	26,875,176	29,701,826	1,805,216	1.17x	3.1%	12.0%	(8.9%)
2006	Thomas, McNerney & Partners II, L.P.	11/30/2006	10,000,000	10,139,667	22,044,274	1,033,907	2.28x	16.7%	11.6%	5.2%
2006	Catterton Partners VI, L.P.	12/14/2006	20,000,000	22,775,054	35,761,963	6,004,456	1.83x	11.3%	8.9%	2.4%
2006	First Reserve Fund XI, L.P.	12/14/2006	20,000,000	21,253,053	13,803,370	819,596	0.69x	(8.1%)	6.8%	(14.9%)
2006	Permira IV, L.P.	12/14/2006	16,126,554	17,593,382	25,416,279	2,091,906	1.56x	8.6%	9.5%	(0.8%)
2006	Arsenal Capital Partners II, LP	12/19/2006	10,000,000	12,195,086	19,452,632	4,254,021	1.94x	12.1%	12.0%	0.1%
2006	RRE Ventures IV, L.P.	12/19/2006	15,000,000	19,052,223	12,141,259	13,733,335	1.36x	4.3%	11.0%	(6.7%)
2006	Coller International Partners V, L.P.	12/21/2006	10,000,000	8,744,365	11,598,430	760,577	1.41x	8.0%	10.7%	(2.6%)
2006	MidOcean Partners III, L.P.	12/21/2006	38,823,185	46,380,826	91,070,481	5,657,577	2.09x	13.0%	9.8%	3.2%
2006	GF Capital Private Equity Fund, L.P.	12/22/2006	10,000,000	10,488,825	13,672,386	4,467,282	1.73x	11.6%	12.0%	(0.5%)
2006	The Fourth Cinven Fund	1/22/2007	13,531,938	14,218,068	20,526,269	(8,662)	1.44x	7.3%	7.5%	(0.2%)
2007	Pegasus Partners IV, L.P.	1/29/2007	15,000,000	18,225,016	13,800,466	3,080,904	0.93x	(1.4%)	11.2%	(12.6%)
2007	Olympus Capital Asia III, L.P.	1/31/2007	20,000,000	23,404,664	11,953,414	6,458,554	0.79x	(5.1%)	11.1%	(16.2%)
2007	FTVentures III, LP	3/1/2007	7,500,000	8,231,525	16,022,587	2,235,643	2.22x	15.7%	10.3%	5.3%
2007	Highland Consumer Fund I LP	3/16/2007	10,000,000	10,016,060	6,120,655	2,008,780	0.81x	(2.8%)	10.8%	(13.6%)
2007	Montreux Equity Partners IV, L.P.	3/27/2007	10,000,000	10,000,000	5,522,350	8,079,418	1.36x	4.5%	10.5%	(6.0%)
2007	Gleacher Mezzanine Fund II, L.P.	3/30/2007	10,000,000	9,197,768	12,187,028	75,307	1.33x	10.6%	11.7%	(1.1%)
2007	Quaker BioVentures II, L.P.	3/30/2007	15,000,000	14,444,055	12,870,505	2,442,918	1.06x	1.3%	12.7%	(11.4%)
2007	SCP Vitalife Partners II Fund	4/13/2007	15,000,000	15,074,774	1,184	8,856,325	0.59x	(5.9%)	10.0%	(15.9%)
2007	Comvest Investment Partners III, L.P.	5/15/2007	15,000,000	19,429,668	26,719,980	70,958	1.38x	7.5%	11.4%	(3.9%)
2007	Constellation Venture Capital III, L.P.	5/22/2007	15,000,000	17,295,938	8,712,259	4,609,507	0.77x	(4.1%)	15.2%	(19.3%)
2007	United States Power Fund III, L.P.	6/28/2007	15,000,000	17,746,993	18,308,108	3,426,792	1.22x	3.6%	9.5%	(5.9%)
2007	Carlyle Partners V, L.P.	7/6/2007	50,000,000	51,532,052	85,213,809	6,969,113	1.79x	13.7%	11.0%	2.7%
2007	PCG Clean Energy & Technology Fund (East), LLC	7/6/2007	40,000,000	36,190,929	9,315,169	4,201,823	0.37x	(13.3%)	13.1%	(26.4%)
2007	GSO Capital Opportunities Fund LP	7/16/2007	17,500,000	26,202,290	37,188,395	257,110	1.43x	17.3%	10.1%	7.2%
2007	New Mountain Partners III, L.P.	8/9/2007	35,000,000	35,653,120	47,462,355	27,331,419	2.10x	13.5%	12.8%	0.7%
2007	Vista Equity Partners Fund III, L.P.	10/3/2007	20,000,000	21,464,283	51,079,934	1,880,307	2.47x	26.9%	9.9%	17.0%
2007	Trilantic Capital Partners IV L.P.	10/22/2007	45,856,523	47,868,579	70,629,425	4,578,616	1.57x	13.5%	11.0%	2.4%
2007	Pine Brook Capital Partners, L.P.	1/11/2008	15,000,000	17,034,149	21,219,552	674,729	1.29x	6.8%	12.0%	(5.2%)
2008	Paladin III (NY City), L.P.	1/8/2008	30,000,000	41,065,348	29,908,122	58,898,027	2.16x	13.7%	12.6%	1.1%
2008	Apollo Investment Fund VII, L.P.	1/28/2008	50,000,000	61,204,659	96,600,411	7,118,034	1.69x	22.5%	13.7%	8.8%
2008	NGN BioMed Opportunity II, L.P.	2/11/2008	10,000,000	9,575,911	6,673,105	4,719,771	1.19x	2.6%	15.0%	(12.4%)
2008	Riverstone/Carlyle Global Energy & Power Fund IV, L.P.	3/3/2008	15,000,000	17,401,737	16,563,787	2,720,060	1.11x	2.8%	13.9%	(11.1%)
2008	Yucaipa American Alliance Fund II, LP	3/28/2008	50,000,000	68,624,624	66,020,091	45,519,025	1.63x	8.8%	12.5%	(3.7%)
2008	Milestone Partners III, L.P.	4/7/2008	15,000,000	16,394,499	13,980,609	1,797,423	0.96x	(0.7%)	12.5%	(13.3%)
2008	Levine Leichtman Capital Partners IV, L.P.	4/8/2008	10,000,000	10,707,203	16,918,959	925,570	1.67x	18.1%	14.3%	3.8%
2008	Yucaipa Corporate Initiatives Fund II, LP	6/23/2008	14,030,930	13,778,130	8,227,223	4,075,236	0.89x	(1.7%)	12.2%	(13.9%)
2008	CVC European Equity Partners V, L.P.	7/21/2008	34,246,280	36,990,385	66,959,033	4,262,068	1.93x	16.2%	12.7%	3.5%
2008	GI Partners Fund III L.P.	7/29/2008	17,500,000	18,907,003	29,485,670	180,802	1.57x	13.0%	15.3%	(2.3%)
2008	Ares Corporate Opportunities Fund III, L.P.	7/30/2008	25,000,000	30,533,959	60,593,466	5,134,442	2.15x	20.5%	12.2%	8.3%
2008	GCM Grosvenor NYCPPF Emerging Manager Fund, L.P.	8/22/2008	59,909,091	75,029,107	69,337,599	37,793,115	1.43x	10.0%	13.6%	(3.7%)
2008	First Reserve Fund XII, L.P.	8/25/2008	20,000,000	22,216,378	11,104,060	3,013,893	0.64x	(10.2%)	16.9%	(27.1%)
2008	Landmark Equity Partners XIV, L.P.	9/19/2008	27,250,000	26,541,159	30,548,131	4,265,610	1.31x	9.4%	14.6%	(5.2%)
2008	Crestview Partners II, L.P.	10/1/2008	22,500,000	26,177,948	33,800,196	11,580,956	1.73x	13.5%	14.7%	(1.2%)
2008	Euro Choice IV L.P.	10/22/2008	19,360,518	17,913,130	18,214,869	7,683,502	1.45x	7.4%	13.3%	(6.0%)
2008	Avista Capital Partners II, L.P.	11/5/2008	35,000,000	46,027,792	72,128,865	5,000,691	1.68x	14.9%	14.7%	0.2%
2008	Blue Wolf Capital Fund II, L.P.	11/14/2008	15,000,000	16,300,742	18,854,994	6,058,303	1.53x	9.3%	15.6%	(6.3%)
2008	Bridgepoint Europe IV	11/14/2008	13,327,269	13,523,775	18,263,849	2,228,332	1.52x	9.8%	14.8%	(5.0%)
2008	Aisling Capital III, LP	11/20/2008	7,000,000	7,896,464	18,009,956	688,935	2.37x	26.2%	14.3%	11.9%
2008	Onex Partners III LP	12/10/2008	15,000,000	16,404,302	21,830,176	5,522,603	1.67x	12.3%	15.0%	(2.7%)
2009	NorthBound Emerging Manager Custom Fund LP	1/29/2009	20,000,000	17,467,088	23,789,323	5,533,933	1.68x	13.1%	14.6%	(1.5%)
2009	Welsh, Carson, Anderson & Stowe XI, L.P.	2/10/2009	22,500,000	22,500,000	29,116,850	7,709,866	1.64x	12.0%	14.8%	(2.8%)
2009	Scale Venture Partners III, LP	5/1/2009	10,000,000	9,894,906	25,501,764	2,561,105	2.84x	23.0%	13.8%	9.2%
2009	FS Equity Partners VI, L.P.	7/27/2009	20,000,000	20,104,995	47,435,328	14,183,556	3.06x	24.1%	14.9%	9.2%
2009	Lincolnshire Equity Fund IV, L.P.	8/5/2009	7,500,000	8,033,139	9,239,001	3,208,189	1.55x	10.4%	13.6%	(3.2%)
2009	Lexington Capital Partners VII, L.P.	12/3/2009	20,000,000	17,846,217	23,430,979	4,631,687	1.57x	13.9%	14.4%	(0.6%)
2010	Snow Phipps II, L.P.	1/8/2010	17,500,000	20,303,477	14,863,182	12,768,508	1.36x	8.9%	14.1%	(5.2%)
2010	Trident V, L.P.	4/29/2010	40,000,000	46,608,482	52,167,466	24,589,977	1.65x	11.3%	12.7%	(1.5%)
2010	Comvest Investment Partners IV, L.P.	10/21/2010	45,000,000	46,167,934	74,289,503	7,301,224	1.77x	28.5%	14.3%	14.2%
2011	Blackstone Capital Partners VI, L.P.	1/24/2011	35,000,000	36,861,935	31,818,008	26,386,609	1.58x	12.1%	12.9%	(0.8%)
2011	Ampersand 2011	3/11/2011	12,500,000	12,500,000	20,229,541	19,159,899	3.15x	22.5%	13.2%	9.3%
2011	BDCM Opportunity Fund III, L.P.	4/8/2011	20,000,000	28,785,404	13,843,051	26,714,763	1.41x	8.5%	13.1%	(4.5%)
2011	AXA Secondary Fund V B L.P.	6/16/2011	80,000,000	65,913,485	104,547,940	1,244,553	1.61x	15.5%	14.8%	0.7%
2011	Wellspring Capital Partners V, L.P.	7/1/2011	22,500,000	23,638,255	26,392,886	10,050,587	1.54x	14.9%	12.5%	2.4%
2011	EQT VI, L.P.	8/1/2011	48,737,105	50,602,887	69,511,341	18,390,198	1.74x	14.2%	12.4%	1.7%
2011	Pegasus Partners V, L.P.	8/16/2011	14,552,940	18,009,763	15,765,091	12,584,382	1.57x	11.5%	14.6%	(3.0%)
2011	BC European Capital IX	9/19/2011	65,880,735	71,523,240	69,266,266	44,956,458	1.60x	12.7%	13.7%	(1.0%)
2011	American Securities Partners VI, L.P.	11/18/2011	50,000,000	53,692,799	80,636,521	25,837,687	1.98x	21.7%	13.4%	8.3%
2011	Vista Equity Partners Fund IV, L.P.	11/30/2011	70,000,000	71,618,867	91,762,767	47,801,928	1.95x	17.2%	13.9%	3.3%
2012	Warburg Pincus Private Equity XI, L.P.	5/24/2012	80,000,000	85,115,264	87,558,201	50,135,570	1.62x	13.3%	12.9%	0.4%
2012	Summit Partners Growth Equity Fund VIII-A, L.P.	6/14/2012	75,000,000	84,977,685	143,371,446	39,761,933	2.16x	26.5%	12.4%	14.1%
2012	NYCPPF - 2012 Emerging Manager Program[4]	6/21/2013	45,000,000	45,312,550	23,651,219	49,163,587	1.61x	15.6%	12.3%	3.3%
2012	Trilantic Capital Partners V L.P.	9/20/2012	50,000,000	54,776,908	52,733,232	30,857,361	1.53x	17.3%	13.0%	4.3%
2012	Palladium Equity Partners IV, L.P.	10/10/2012	35,000,000	32,933,728	17,048,528	29,905,971	1.43x	11.7%	13.9%	(2.2%)
2012	Ares Corporate Opportunities Fund IV, L.P.	11/5/2012	50,000,000	52,838,688	33,009,041	47,820,858	1.53x	12.6%	12.0%	0.6%
2012	Green Equity Investors VI, L.P.	11/30/2012	55,000,000	59,299,122	41,960,965	62,504,725	1.76x	16.1%	12.8%	3.3%

New York City Police Pension Fund, Subchapter 2
Private Equity Portfolio
As of December 31, 2019 (in USD)

Vintage Year	Investment	First Drawdown	Committed Capital	Contributed Capital	Distributed Capital	Market Value	Multiple	IRR[1]	PME Benchmark[2]	PME Spread[3]
2012	Platinum Equity Capital Partners III, L.P.	1/14/2013	50,000,000	43,677,356	58,703,295	26,367,443	1.95x	36.6%	13.6%	23.0%
2012	Neuberger Berman Strategic Co-Investment II LP	3/20/2013	60,000,000	57,069,637	55,631,239	25,391,463	1.42x	12.0%	12.0%	(0.1%)
2013	Carlyle Partners VI, L.P.	7/3/2013	60,000,000	63,425,223	27,268,870	56,724,034	1.32x	10.1%	12.3%	(2.2%)
2014	Carlyle Partners VI, L.P. (Side Car)	9/23/2014	6,600,000	4,798,851	276,667	4,380,937	0.97x	(0.8%)	12.4%	(13.2%)
2013	Landmark Equity Partners XV, L.P.	10/30/2013	67,000,000	49,670,183	36,541,175	26,407,512	1.27x	11.6%	12.2%	(0.6%)
2013	Landmark - NYC Fund I, L.P.	12/24/2013	23,000,000	19,516,097	13,264,995	14,545,317	1.42x	14.2%	11.0%	3.2%
2013	Apollo Investment Fund VIII, L.P.	12/11/2013	100,000,000	91,954,789	42,682,260	86,195,024	1.40x	12.3%	13.0%	(0.7%)
2014	CVC Capital Partners VI, L.P.	2/18/2014	88,071,835	89,285,220	40,167,664	92,394,546	1.48x	16.0%	12.9%	3.1%
2013	Crestview Partners III, L.P.	3/3/2015	45,000,000	31,687,447	19,201,973	22,509,945	1.32x	12.0%	13.2%	(1.3%)
2013	Crestview Partners III (Co-Investment B), L.P.	12/17/2015	15,000,000	15,235,058	740,414	16,245,382	1.11x	4.3%	15.1%	(10.7%)
2014	Olympus Growth Fund VI, L.P.	1/21/2014	35,000,000	29,307,573	13,224,758	25,990,263	1.34x	12.1%	14.2%	(2.1%)
2014	ASF VI B L.P.	5/9/2014	60,000,000	46,711,976	35,816,576	30,835,302	1.43x	12.5%	12.1%	0.5%
2014	ASF VI B NYC Co-Invest L.P.	5/9/2014	20,000,000	16,050,653	14,705,427	8,088,299	1.42x	12.6%	9.7%	2.8%
2014	Vista Equity Partners Fund V, L.P.	9/8/2014	85,000,000	98,754,619	101,988,111	84,412,512	1.89x	21.8%	12.2%	9.7%
2014	Lexington Capital Partners VIII, L.P.	1/8/2015	80,000,000	69,548,071	35,143,296	57,036,139	1.33x	17.1%	13.9%	3.3%
2015	Siris Partners III, L.P.	5/4/2015	15,000,000	13,533,137	7,106,423	10,226,608	1.28x	12.4%	12.8%	(0.4%)
2015	Centerbridge Capital Partners III, L.P.	5/21/2015	11,100,000	9,076,935	3,755,045	8,700,873	1.37x	16.4%	12.9%	3.5%
2015	Welsh, Carson, Anderson & Stowe XII, L.P.	8/26/2015	37,000,000	33,032,871	15,305,990	38,920,288	1.64x	26.1%	14.3%	11.8%
2015	Warburg Pincus Private Equity XII, L.P.	12/21/2015	97,000,000	90,926,389	9,154,697	107,063,428	1.28x	13.9%	14.2%	(0.3%)
2015	ASF VII B L.P.	12/29/2015	44,500,000	19,274,154	4,326,824	21,466,955	1.34x	17.1%	13.5%	3.6%
2015	ASF VII B NYC Co-Invest L.P.	12/29/2015	22,000,000	12,750,758	3,437,042	16,832,078	1.59x	29.1%	12.5%	16.5%
2015	EQT VII, L.P.	1/8/2016	77,003,845	74,843,009	34,385,018	78,023,671	1.50x	21.1%	13.7%	7.4%
2015	American Securities Partners VII, L.P.	1/19/2016	37,000,000	29,966,918	4,491,819	24,220,919	0.96x	(2.2%)	14.4%	(16.6%)
2015	Bridgepoint Europe V L.P.	2/8/2016	29,691,120	29,117,067	10,450,353	28,134,309	1.33x	14.1%	13.8%	0.3%
2015	Bridgepoint Europe V Co-Invest	8/16/2016	8,145,854	7,563,632	3,321,506	10,859,855	1.87x	31.8%	12.9%	18.8%
2015	NYCPPF - 2015 Emerging Manager Program[5]	2/22/2016	59,750,000	29,633,442	5,502,465	32,624,021	1.29x	21.1%	15.4%	5.7%
2016	Vista Equity Partners Fund VI, L.P.	6/28/2016	75,000,000	81,943,220	18,719,365	97,053,298	1.41x	17.6%	14.6%	3.0%
2016	Platinum Equity Capital Partners IV, L.P.	3/21/2017	52,500,000	44,918,211	12,470,112	46,740,112	1.32x	22.5%	13.7%	8.8%
2018	Platinum Equity Capital Partners IV Co-Investment, L.P.	9/7/2018	7,500,000	5,250,000	-	7,218,989	1.38x	NM	NM	N/A
2016	Apax IX USD, L.P.	5/12/2017	60,000,000	55,411,184	1,577,762	76,231,622	1.40x	29.5%	14.9%	14.6%
2017	Green Equity Investors VII, L.P.	5/12/2017	44,000,000	30,700,086	394,137	37,000,757	1.22x	13.4%	13.4%	0.0%
2017	Ares Corporate Opportunities Fund V, L.P.	6/22/2017	44,000,000	37,883,524	4,133,041	37,603,609	1.10x	8.7%	13.8%	(5.0%)
2017	KKR Americas Fund XII, L.P.	10/31/2017	75,000,000	35,926,600	494,426	40,150,071	1.13x	10.8%	13.3%	(2.5%)
2017	BC European Capital X	12/14/2017	42,058,066	27,058,394	546,034	31,938,316	1.20x	15.1%	15.3%	(0.1%)
2017	BCEC X Co-Investment	3/24/2017	16,986,513	15,669,976	-	20,252,682	1.29x	21.2%	13.3%	7.9%
2017	Warburg Pincus Financial Sector, L.P.	1/5/2018	62,000,000	34,221,112	3,162,000	33,663,141	1.08x	NM	NM	N/A
2018	Platinum Equity Small Cap Fund, L.P.	6/27/2018	28,500,000	4,835,117	-	3,024,237	0.63x	NM	NM	N/A
2018	EQT VIII, L.P.	8/10/2018	76,723,931	33,860,064	944,475	36,362,069	1.10x	NM	NM	N/A
2018	EQT VIII Co-Investment	11/2/2018	27,868,094	15,194,041	-	16,308,559	1.07x	NM	NM	N/A
2018	CVC Capital Partners VII, L.P.	12/4/2018	91,844,306	45,915,732	386,364	49,068,782	1.08x	NM	NM	N/A
2017	Palladium Equity Partners V, L.P.	2/11/2019	23,333,333	6,450,154	77,805	5,409,415	0.85x	NM	NM	N/A
2018	Vista Equity Partners Fund VII, L.P.	2/13/2019	124,500,000	30,521,781	90,120	29,417,897	0.97x	NM	NM	N/A
2019	Welsh, Carson, Anderson & Stowe XIII, L.P.	3/14/2019	62,000,000	454,788	-	(1,180,342)	(2.60x)	NM	NM	N/A
2018	Siris Partners IV, L.P.	3/15/2019	62,000,000	28,515,549	-	33,397,075	1.17x	NM	NM	N/A
2018	Apollo Investment Fund IX, L.P.	3/15/2019	154,000,000	27,920,986	224,949	25,009,985	0.90x	NM	NM	N/A
2019	ASF VIII B L.P.	3/15/2019	111,000,000	7,426,046	325	11,183,306	1.51x	NM	NM	N/A
2019	ASF VIII B NYC Co-Invest L.P.	3/15/2019	55,500,000	2,203,257	-	4,124,275	1.87x	NM	NM	N/A
2019	Warburg Pincus Global Growth, L.P.	3/26/2019	80,000,000	12,767,068	-	11,703,072	0.92x	NM	NM	N/A
2018	Bridgepoint Europe VI	4/1/2019	83,503,632	12,329,802	-	13,465,373	1.09x	NM	NM	N/A
2018	Bridgepoint Europe VI Co-Invest	5/7/2019	20,914,077	3,461,035	-	3,637,852	1.05x	NM	NM	N/A
2019	Trilantic Capital Partners VI (North America) L.P.	8/8/2019	40,000,000	9,885,095	8,850	8,818,312	0.89x	NM	N/A	N/A
2019	NYCPPF - 2019 Emerging Manager Program[6]	9/25/2019	75,250,000	3,303,589	-	3,614,103	1.09x	NM	N/A	N/A
2019	Lexington Capital Partners IX	12/1/2020	74,625,000	5,284,943	-	9,386,036	1.78x	NM	N/A	N/A
2019	Platinum Equity Capital Partners V, L.P.	12/27/2020	119,000,000	405,741	-	307,196	0.76x	NM	N/A	N/A
2019	Apax X USD L.P.	N/A	66,500,000	-	-	(461,742)	-	N/A	N/A	N/A
2019	Blackstone Capital Partners VIII L.P.	N/A	69,500,000	-	-	-	-	N/A	N/A	N/A
2019	Crestview Partners IV, L.P.	N/A	50,000,000	-	-	96,955	-	NM	NM	N/A
2019	Crestview Partners IV (Co-Investment), L.P.	N/A	16,666,667	-	-	42,750	-	NM	NM	N/A
2020	Green Equity Investors VIII, L.P.	N/A	69,500,000	-	-	-	-	N/A	N/A	N/A
2020	Green Equity Investors VIII Coinvest N, L.P.	N/A	23,200,000	-	-	-	-	N/A	N/A	N/A
2019	KKR European Fund V (USD)	N/A	50,150,000	-	-	(483,927)	-	N/A	N/A	N/A
2019	Lexington IX Co-Invest	N/A	24,875,000	-	-	(27,914)	-	N/A	N/A	N/A
2019	Lindsay Goldberg V	N/A	55,500,000	-	-	-	-	N/A	N/A	N/A
2020	Platinum Equity Capital Partners V Co-Investment, L.P.	N/A	29,750,000	-	-	-	-	N/A	N/A	N/A
Total Portfolio[7]			**$ 7,002,839,324**	**$ 5,564,192,415**	**$ 5,519,616,735**	**$ 2,728,804,734**	**1.48x**	**10.8%**	**10.5%**	**0.4%**

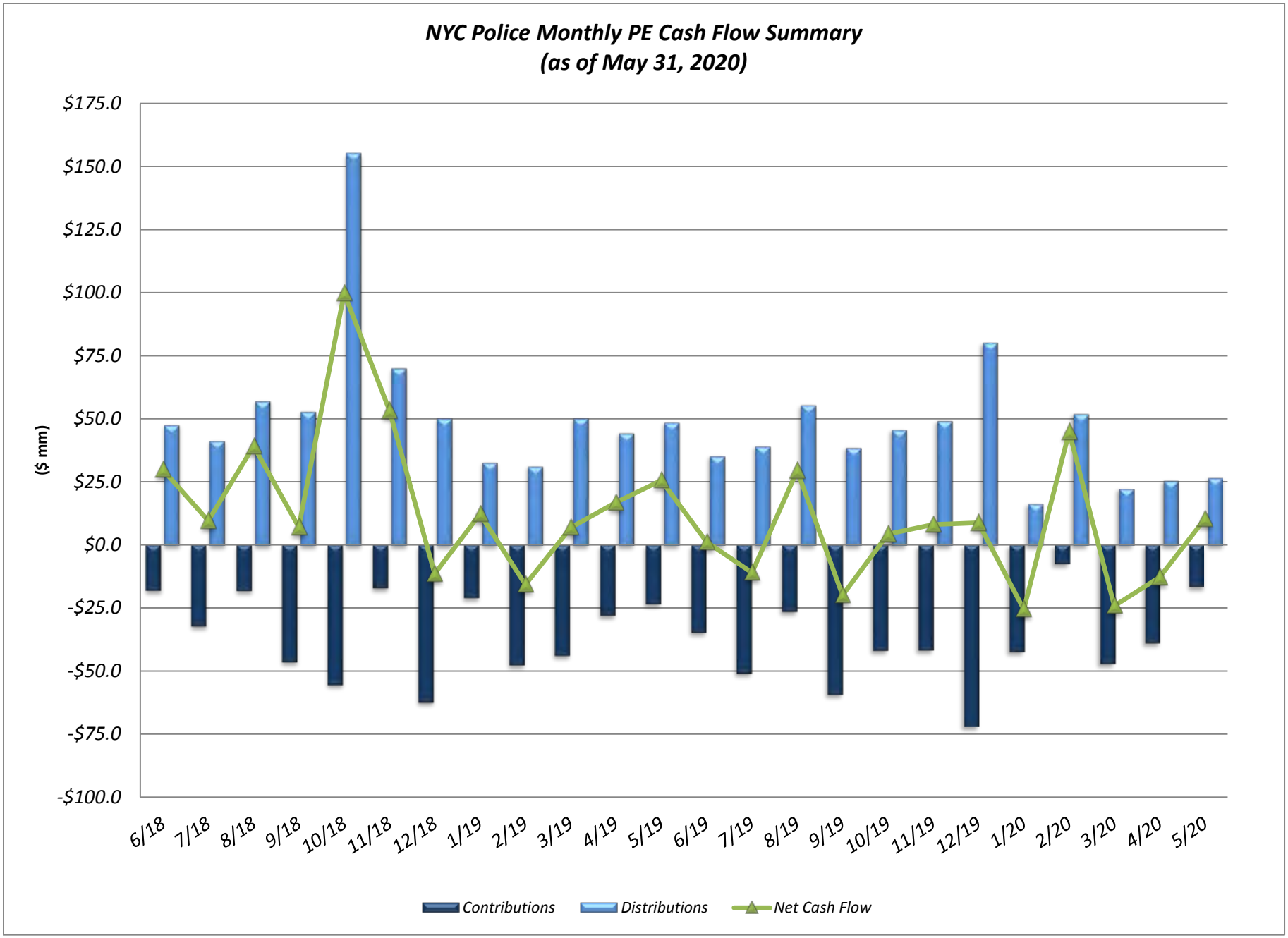
Vintage Year	Investment	First Drawdown	Committed Capital	Contributed Capital	Distributed Capital	Market Value	Multiple	IRR[1]	PME Benchmark[2]	PME Spread[3]
Commitments Closed Subsequent to as of Date										
2020	FTV VI	N/A	$ 7,500,000	$ -	$ -	$ -	N/A	N/A	N/A	N/A
2020	Clearlake Capital Partners VI, L.P.	N/A	30,000,000	-	-	-	N/A	N/A	N/A	N/A
2020	Hg Genesis 9, L.P.	N/A	32,055,614	-	-	-	N/A	N/A	N/A	N/A
2020	One Rock Capital Partners III, L.P.	N/A	27,500,000	-	-	-	N/A	N/A	N/A	N/A
2020	CVC Capital Partners VIII, L.P.	N/A	109,111,730	-	-	-	N/A	N/A	N/A	N/A
Total Commitments Closed Subsequent to as of Date			**$ 206,167,344**	**$ -**	**$ -**	**$ -**	**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 Return.
[4] NYCPPF - 2012 Emerging Manager Program includes the total commitment amount of $47.0 million. The Program's original commitment amount of $50.0 million was subsequently revised to $47.0 million, all of which has been committed as of December 31, 2019. The remaining $3.0 million was reallocated to the NYCPPF - 2015 Emerging Manager Program.
[5] NYCPPF - 2015 Emerging Manager Program includes the total commitment amount of $63.0 million. The Program's original commitment amount of $63.0 million, which included the original $60.0 million commitment and the $3.0 million reallocation from the NYCPPF - 2012 Emerging Manager Program, was subsequently revised to $59.8 million. As of December 31, 2019, all $59.8 million has been committed, and the remaining $3.3 million was reallocated to the NYCPPF - 2019 EmergingManager Program.
[6] NYCPPF - 2019 Emerging Manager Program commitment amount totals $75.3 million, which includes the Program's original $72.0 million commitment and the $3.3 million reallocation from the NYCPPF - 2015 Emerging Manager Program. As of December 31, 2019, $9.0 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 Police Pension Fund, Subchapter 2, 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.


NYC Police Monthly PE Cash Flow Summary
(as of May 31, 2020)
$175.0
$150.0
$125.0
$100.0
$75.0
$50.0
$25.0
$0.0
-$25.0
-$50.0
-$75.0
-$100.0
($ mm)
6/18
7/18
8/18
9/18
10/18
11/18
12/18
1/19
2/19
3/19
4/19
5/19
6/19
7/19
8/19
9/19
10/19
11/19
12/19
1/20
2/20
3/20
4/20
5/20
Contributions
Distributions
Net Cash Flow

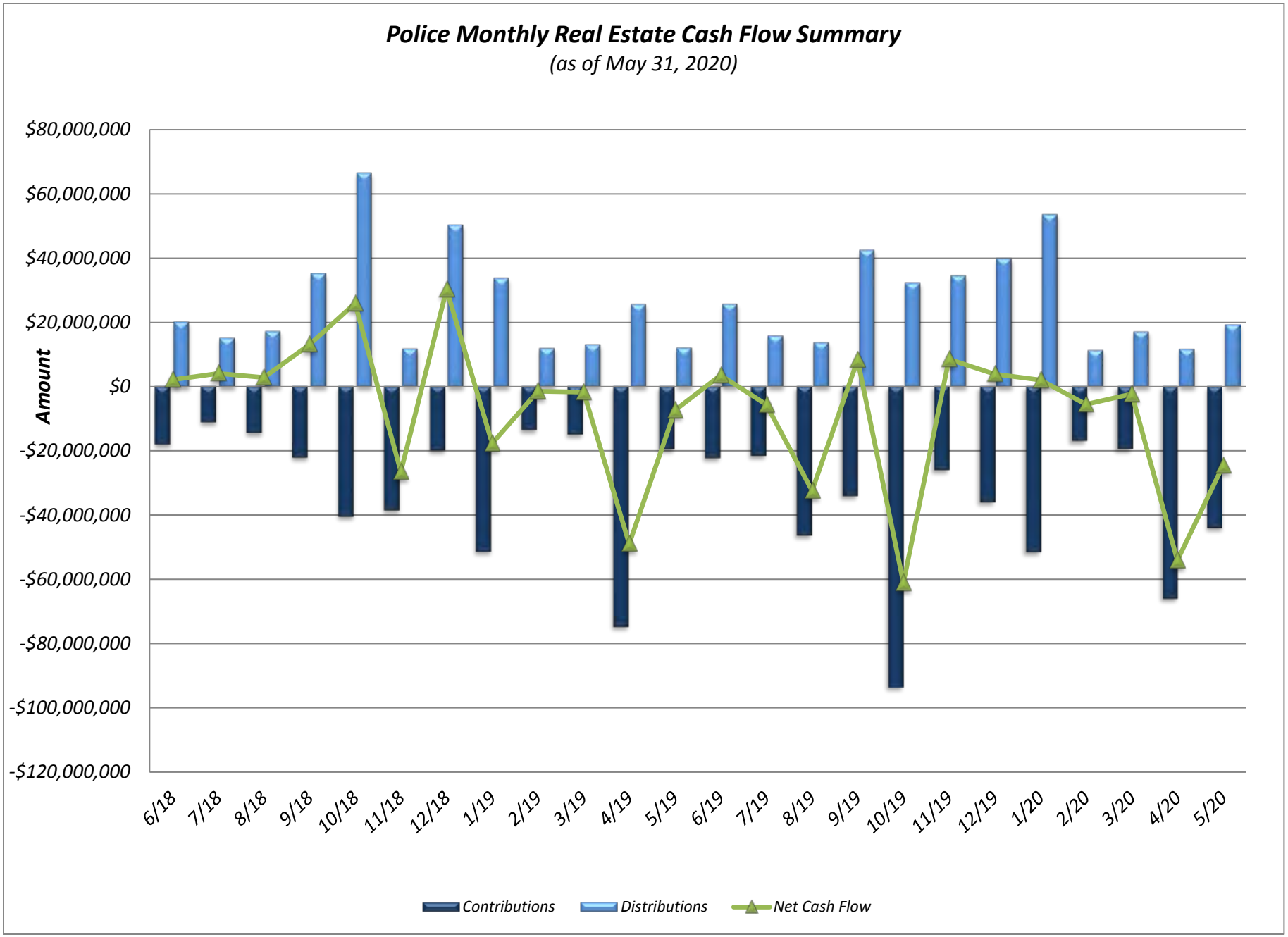
TOWNSEND GROUP
an Aon company

New York City Police Pension Fund 4Q 2019

Vintage Year	Fund Name	Style Sector	Geographic Play	First Draw Down	Capital Committed	Contributions	Distributions	Market Value	Equity Multiple	Net IRR
2012	Almanac Realty Securities VI	Core / Core Plus Portfolio	Developed Americas	6/6/2012	50,000,000	33,444,956	-36,587,072	8,883,280	1.4	11.5
2012	Almanac Realty Securities VI (Sidecar II)	Core / Core Plus Portfolio	Developed Americas	7/31/2012	15,000,000	5,829,583	-5,302,452	3,610,212	1.5	14.0
2015	Almanac Realty Securities VII	Core / Core Plus Portfolio	Developed Americas	4/24/2015	50,000,000	39,601,872	-31,871,957	21,806,561	1.4	14.2
2016	Almanac Realty Securities VII (Sidecar II)	Core / Core Plus Portfolio	Developed Americas	12/9/2015	20,000,000	10,142,088	-9,188,416	6,197,708	1.5	18.3
2019	Almanac Realty Securities VIII	Core / Core Plus Portfolio	Developed Americas	12/21/2018	42,000,000	4,054,140	-72,351	3,568,335	0.9	-25.2
2019	Almanac Realty Securities VIII (Sidecar II)	Core / Core Plus Portfolio	Developed Americas	12/21/2018	28,000,000	2,820,108	-70,757	2,961,065	1.1	20.8
2019	Artemis Real Estate Partners Income and Growth Fund	Core / Core Plus Portfolio	Developed Americas	10/18/2019	18,000,000	2,972,998	0	2,985,110	1.0	0.8
2017	Brookfield Premier Real Estate Partners	Core / Core Plus Portfolio	Developed Americas	11/22/2016	61,000,000	68,406,181	-8,224,169	82,552,319	1.3	11.3
2017	Carlyle Property Investors	Core / Core Plus Portfolio	Developed Americas	7/3/2017	61,000,000	66,620,723	-6,378,327	71,808,238	1.2	8.1
2007	Colony Realty Partners II	Core / Core Plus Portfolio	Developed Americas	12/20/2006	20,000,000	21,420,211	-5,540,084	0	0.3	-13.4
2016	Exeter Industrial Core Club Fund II	Core / Core Plus Portfolio	Developed Americas	5/20/2016	19,000,000	18,259,000	-2,514,600	20,171,981	1.2	13.2
2020	Exeter Industrial Core Fund III, LP	Core / Core Plus Portfolio	Developed Americas		63,600,000	0	0	-167,287	n/a	n/a
2019	Harrison Street Core Property Fund, L.P.	Core / Core Plus Portfolio	Developed Americas	10/4/2019	20,000,000	20,061,134	-256,273	20,314,941	1.0	2.6
2019	Heitman Core Real Estate Debt Income Trust	Core / Core Plus Portfolio	Developed Americas	11/2/2018	28,000,000	29,568,538	-1,568,538	30,003,830	1.1	7.0
2007	Heitman HART	Core / Core Plus Portfolio	Developed Americas	3/29/2007	28,000,000	46,252,479	-18,252,479	62,666,037	1.7	7.4
2019	HSRE-Centre Street Core Co-Investment, L.P.	Core / Core Plus Portfolio	Developed Americas	5/31/2019	10,000,000	6,310,680	-88,085	6,440,759	1.0	4.7
2016	Jamestown Premier Property Fund	Core / Core Plus Portfolio	Developed Americas	2/4/2016	26,000,000	31,195,989	-13,782,005	24,237,125	1.2	8.0
2007	JP Morgan Special Situation Property Fund	Core / Core Plus Portfolio	Developed Americas	1/2/2007	15,000,000	17,613,742	-6,535,318	22,205,238	1.6	4.7
2007	JP Morgan Strategic Property Fund	Core / Core Plus Portfolio	Developed Americas	12/4/2006	56,000,000	62,422,616	-1,810,834	130,701,000	2.1	7.7
2010	LaSalle Property Fund	Core / Core Plus Portfolio	Developed Americas	7/1/2010	115,000,000	100,973,168	-21,035,348	125,746,088	1.5	10.1
2017	Lion Industrial Trust - 2007	Core / Core Plus Portfolio	Developed Americas	1/1/2017	110,000,000	97,118,447	-6,260,929	116,250,722	1.3	14.8
2014	MetLife Core Property Fund	Core / Core Plus Portfolio	Developed Americas	7/1/2014	99,000,000	88,633,082	-10,971,845	101,035,034	1.3	9.8
2013	NYC Asset Investor #2 LLC	Core / Core Plus Portfolio	Developed Americas	7/9/2013	60,000,000	60,259,071	-25,136,824	45,458,368	1.2	4.2
2016	NYCRS Artemis Co-Investment (SEM)	Core / Core Plus Portfolio	Developed Americas	2/24/2016	35,000,000	40,163,907	-15,422,552	34,048,778	1.2	16.2
2007	PRISA II	Core / Core Plus Portfolio	Developed Americas	6/30/2007	60,278,867	63,729,327	-22,726,417	93,162,292	1.8	5.9
2006	PRISA SA	Core / Core Plus Portfolio	Developed Americas	9/29/2006	21,000,000	22,590,656	-9,324,392	30,245,165	1.8	4.9
2006	Prologis Targeted U.S. Logistics Fund	Core / Core Plus Portfolio	Developed Americas	10/1/2006	10,000,000	13,594,865	-4,983,979	20,732,142	1.9	6.3
2006	RREEF America REIT II	Core / Core Plus Portfolio	Developed Americas	10/1/2006	21,000,000	27,724,347	-15,301,950	30,879,528	1.7	5.3
2006	UBS Trumbull Property Fund	Core / Core Plus Portfolio	Developed Americas	9/28/2006	61,000,000	94,023,872	-94,683,058	49,135,265	1.5	6.3
2016	USAA Eagle Real Estate Fund	Core / Core Plus Portfolio	Developed Americas	12/1/2015	75,000,000	70,530,886	0	83,673,089	1.2	7.5
	Core / Core Plus Portfolio				**1,297,878,867**	**1,166,338,666**	**-373,891,011**	**1,251,312,923**	**1.4**	**6.6**
2019	AERMONT Real Estate Fund IV	Non-Core Portfolio	Developed Europe	4/18/2019	19,401,963	3,219,225	0	3,428,360	1.1	12.4
2008	AG Realty Fund VII	Non-Core Portfolio	Developed Americas	5/20/2008	25,000,000	23,454,500	-34,815,911	610,161	1.5	12.6
2008	American Value Partners Fund I (SEM)	Non-Core Portfolio	Developed Americas	10/18/2007	15,000,000	11,355,858	-10,239,833	1,167,107	1.0	0.1
2006	AREA Real Estate Investment Fund V, LP	Non-Core Portfolio	Developed Americas	6/15/2006	5,000,000	5,000,004	-5,400,981	339,190	1.1	1.7
2008	Ares European Real Estate Fund III, LP	Non-Core Portfolio	Developed Europe	5/6/2008	30,000,000	30,487,500	-33,237,500	571,882	1.1	2.6
2015	Avanath Affordable Housing Fund II (SEM)	Non-Core Portfolio	Developed Americas	7/14/2015	5,000,000	4,861,193	-1,365,281	6,578,297	1.6	12.5
2018	Basis Investment Group Fund I (SEM)	Non-Core Portfolio	Developed Americas	11/16/2017	9,500,000	4,674,684	-941,168	4,534,270	1.2	13.1
2004	Blackstone Fund IV	Non-Core Portfolio	Developed Americas	5/10/2004	15,000,000	19,220,353	-26,647,725	566,035	1.4	10.3
2010	Blackstone Real Estate Partners Europe III (USD Vehicle)	Non-Core Portfolio	Developed Europe	10/24/2008	35,000,000	36,492,427	-48,460,723	5,746,523	1.5	10.9
2014	Blackstone Real Estate Partners Europe IV (USD Vehicle)	Non-Core Portfolio	Developed Europe	12/23/2013	97,500,000	94,643,307	-106,362,499	39,348,513	1.5	15.0
2020	Blackstone Real Estate Partners Europe VI (EURO Vehicle)	Non-Core Portfolio	Developed Europe	11/20/2019	69,992,113	2,391,972	0	2,361,228	1.0	-1.4
2019	Blackstone Real Estate Partners IX	Non-Core Portfolio	Global	9/23/2019	101,000,000	17,464,984	-387,664	17,402,972	1.0	3.7
2007	Blackstone Real Estate Partners VI	Non-Core Portfolio	Developed Americas	9/27/2007	40,000,000	44,681,307	-86,420,919	3,075,066	2.0	13.3
2012	Blackstone Real Estate Partners VII	Non-Core Portfolio	Global	3/31/2012	100,000,000	123,690,974	-158,845,942	49,350,641	1.7	17.1
2015	Blackstone Real Estate Partners VIII	Non-Core Portfolio	Global	8/18/2015	101,000,000	105,904,121	-39,999,322	102,408,058	1.3	16.4
2012	Brookfield Strategic Real Estate Partners	Non-Core Portfolio	Global	9/20/2012	60,000,000	68,339,131	-102,562,814	34,367,937	2.0	20.5
2019	Brookfield Strategic Real Estate Partners III	Non-Core Portfolio	Global	4/12/2019	95,000,000	23,341,732	-7,600	24,644,553	1.1	6.2
2005	Canyon Johnson Urban Fund II	Non-Core Portfolio	Developed Americas	5/11/2005	20,000,000	17,977,405	-7,949,305	66,584	0.4	-10.4
2007	Carlyle Realty Partners V	Non-Core Portfolio	Developed Americas	8/27/2007	20,000,000	25,363,459	-33,026,831	3,899,475	1.5	8.6
2011	Carlyle Realty Partners VI	Non-Core Portfolio	Developed Americas	9/14/2011	40,000,000	38,480,345	-62,362,235	4,026,438	1.7	25.0
2014	Carlyle Realty Partners VII	Non-Core Portfolio	Developed Americas	6/30/2014	60,000,000	53,987,087	-51,022,242	27,456,368	1.5	16.0
2007	Colony Investors VIII	Non-Core Portfolio	Global	9/18/2007	20,000,000	21,249,679	-9,077,487	400,052	0.4	-11.5
2012	Divco West Fund III	Non-Core Portfolio	Developed Americas	12/30/2011	70,000,000	68,667,971	-118,691,523	134,765	1.7	23.9
2014	Divco West Fund IV	Non-Core Portfolio	Developed Americas	1/15/2014	70,000,000	69,301,157	-105,751,116	10,323,414	1.7	25.6
2017	Divco West Fund V	Non-Core Portfolio	Developed Americas	12/21/2016	40,000,000	21,344,526	0	24,853,811	1.2	8.1
2017	DRA Growth and Income Fund IX	Non-Core Portfolio	Developed Americas	3/9/2017	27,000,000	25,503,104	-6,255,436	23,953,915	1.2	15.0
2016	European Property Investors Special Opportunities IV (EPISO IV)	Non-Core Portfolio	Developed Europe	12/18/2015	32,413,099	26,735,872	-3,519,043	29,107,179	1.2	10.6
2017	Exeter Industrial Value Fund IV	Non-Core Portfolio	Developed Americas	9/20/2017	16,000,000	13,600,000	0	15,742,016	1.2	13.0
2020	GreenOak Asia III (USD Vehicle)	Non-Core Portfolio	Developed Asia		40,000,000	0	0	-183,623	n/a	n/a
2011	H/2 Special Opportunities Fund II	Non-Core Portfolio	Developed Americas	1/31/2011	25,000,000	25,000,000	-36,326,690	1,846,224	1.5	14.1
2015	H/2 Special Opportunities Fund III	Non-Core Portfolio	Developed Americas	12/29/2014	40,000,000	40,000,000	-33,933,698	19,368,242	1.3	11.5
2017	H/2 Special Opportunities Fund IV	Non-Core Portfolio	Developed Americas	11/15/2016	61,000,000	25,870,429	0	28,656,839	1.1	9.3
2017	KKR CMBS B-Piece SMA	Non-Core Portfolio	Developed Americas	9/27/2017	81,000,000	72,294,174	-9,805,293	73,779,953	1.2	10.0
2018	KKR Real Estate Partners Americas II	Non-Core Portfolio	Developed Americas	2/9/2018	65,850,000	36,756,722	-6,211,426	38,876,650	1.2	27.1
2014	Lone Star Real Estate Fund III	Non-Core Portfolio	Global	5/20/2014	75,000,000	70,306,161	-86,780,891	9,228,109	1.4	14.8
2017	Lone Star Real Estate Fund V	Non-Core Portfolio	Global	9/26/2017	92,700,000	24,205,221	-5,939,072	17,333,644	1.0	-4.5
2007	Metropolitan Workforce Housing Fund (SEM)	Non-Core Portfolio	Developed Americas	7/13/2007	7,000,000	7,006,513	-8,372,246	131,372	1.2	3.9
2013	NYC Asset Investor #1 LLC	Non-Core Portfolio	Developed Americas	6/25/2013	30,000,000	33,027,783	-15,278,554	25,775,759	1.2	5.4
2013	NYC Asset Investor #3 LLC	Non-Core Portfolio	Developed Americas	9/20/2013	40,000,000	26,193,791	-4,631,128	31,421,590	1.4	9.8
2017	Pramerica Real Estate Capital VI (PRECap VI)	Non-Core Portfolio	Developed Europe	4/21/2017	32,630,522	26,184,950	-14,261,512	16,977,570	1.2	18.9
2008	PRISA III	Non-Core Portfolio	Developed Americas	9/30/2008	30,000,000	35,657,776	0	103,536,226	2.9	11.8
2016	PW Real Estate Fund III LP	Non-Core Portfolio	Developed Europe	10/7/2016	30,811,730	21,357,229	-8,176,096	30,938,442	1.8	34.4
2008	Silverpeak Legacy Partners III	Non-Core Portfolio	Global	5/28/2008	30,000,000	13,301,089	-2,649,052	2,089,660	0.4	-10.6
2008	Stockbridge Real Estate Fund III	Non-Core Portfolio	Developed Americas	9/9/2008	27,000,000	26,998,145	-16,829,753	14,887,666	1.2	2.3
2012	Taconic New York City Investment Fund LP	Non-Core Portfolio	Developed Americas	7/5/2012	40,000,000	16,727,272	-27,092,715	2,730,238	1.8	15.9
2004	The City Investment Fund I	Non-Core Portfolio	Developed Americas	3/16/2004	70,000,000	69,030,360	-69,808,600	112,405	1.0	0.3
2009	Thor Urban Property Fund II	Non-Core Portfolio	Developed Americas	10/30/2008	20,000,000	27,398,054	-27,390,625	6,152,577	1.2	5.9
2009	Walton Street Real Estate Fund VI	Non-Core Portfolio	Global	4/27/2009	30,000,000	26,594,360	-30,436,207	10,548,565	1.5	8.5
2008	Westbrook Real Estate Fund VII	Non-Core Portfolio	Global	12/3/2007	10,000,000	11,217,214	-10,557,579	2,671,747	1.2	2.8
2010	Westbrook Real Estate Fund VIII	Non-Core Portfolio	Global	12/28/2009	35,000,000	41,766,946	-48,229,691	6,492,391	1.3	11.0
2016	Westbrook Real Estate Fund X	Non-Core Portfolio	Global	7/18/2016	24,000,000	18,962,034	-9,431,577	13,050,426	1.2	13.5
	Non-Core Portfolio				**2,175,799,427**	**1,697,290,100**	**-1,525,493,505**	**892,887,482**	**1.4**	**10.5**
	Small Emerging Manager				**71,500,000**	**68,062,156**	**-36,341,080**	**46,459,824**	**1.2**	**6.7**
	New York City Police Pension Fund				**3,473,678,294**	**2,863,628,766**	**-1,899,384,516**	**2,144,200,405**	**1.4**	**8.6**

Additional Funds Closed		
	Core / Core Plus Portfolio	
2019	Kayne Anderson Core Real Estate	30,000,000
	Core / Core Plus Portfolio Subtotal	**30,000,000**
	Non-Core Portfolio	
2019	Westbrook Real Estate Fund XI	25,000,000
	Non-Core Portfolio Subtotal	**25,000,000**
	Additional Funds Closed to Date Grand Total	**55,000,000**

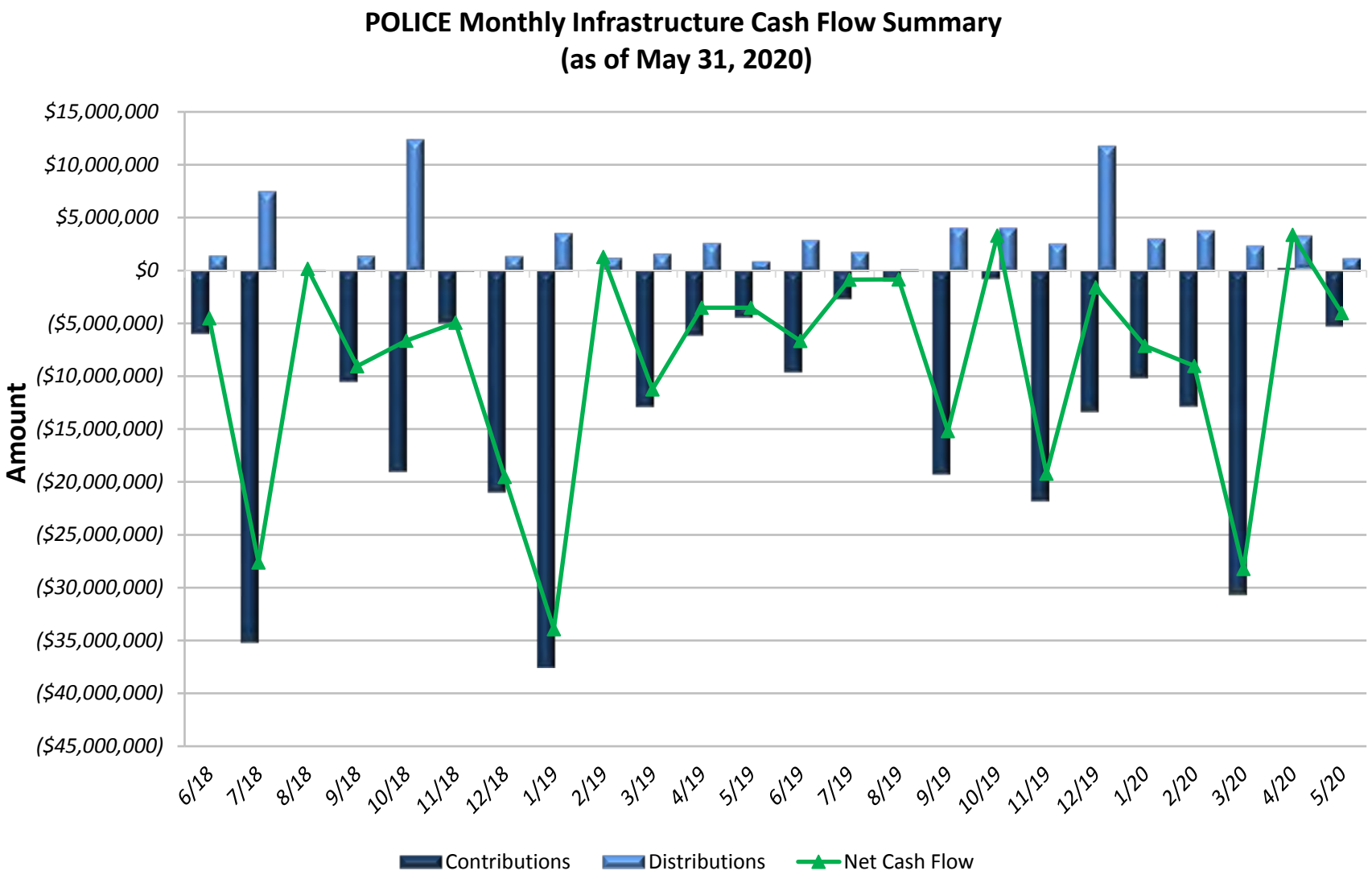
Source: PCG historical cash flow data. TTG cash flow data from Fund Managers, effective 2005. Note: The equity multiples and IRRs contained in this report are interim calculations based upon information provided by the investment managers of the New York City Retirement Systems, including cash flows 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 December 31, 2019.


Police Monthly Real Estate Cash Flow Summary
(as of May 31, 2020)
$80,000,000
$60,000,000
$40,000,000
$20,000,000
$0
-$20,000,000
-$40,000,000
-$60,000,000
-$80,000,000
-$100,000,000
-$120,000,000
Amount
6/18
7/18
8/18
9/18
10/18
11/18
12/18
1/19
2/19
3/19
4/19
5/19
6/19
7/19
8/19
9/19
10/19
11/19
12/19
1/20
2/20
3/20
4/20
5/20
Contributions
Distributions
Net Cash Flow

New York City Police Pension Fund, Subchapter 2
Infrastructure Portfolio
As of December 31, 2019

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	$60,000,000	$49,997,130	$19,692,325	$58,280,664	1.6x	12.0%
2014	IFM Global Infrastructure Fund	1/2/2014	$60,000,000	$80,109,292	$29,685,136	$94,517,738	1.6x	13.0%
2014	Global Energy & Power Infrastructure Fund II	4/16/2014	$40,000,000	$40,252,629	$30,107,138	$26,340,978	1.4x	28.7%
2016	Global Infrastructure Partners III-A/B, L.P.	1/29/2016	$71,000,000	$58,006,493	$7,876,489	$58,229,461	1.1x	7.2%
2016	Brookfield Infrastructure Fund III, L.P.	4/15/2016	$61,000,000	$32,752,114	$5,002,582	$34,004,410	1.2x	10.0%
2016	Actis Energy 4	12/16/2016	$39,600,000	$26,245,988	$3,760,146	$30,996,000	1.3x	21.9%
2017	EQT Infrastructure III (No.2) SCSp	2/18/2017	$34,574,172	$31,969,729	$3,135,058	$36,007,908	1.2x	15.8%
2017	ASF VII Infrastructure L.P.	4/24/2017	$42,000,000	$16,339,047	$1,751,298	$17,465,949	1.2x	20.4%
2017	Axium Infrastructure North America	8/14/2017	$42,662,239	$43,287,852	$3,701,528	$44,220,697	1.1x	9.6%
2017	NYCRS EIG Energy Partners, L.P.	8/14/2017	$42,350,000	$9,460,676	$1,170,021	$9,293,870	1.1x	9.0%
2018	NYCRS EIG Energy Partners Co-Investment, L.P.	1/12/2018	$10,590,000	-	-	-	NM	NM
2018	KKR Global Infrastructure Investors III L.P.	3/29/2018	$54,700,000	$16,014,092	$229,789	$15,831,197	NM	NM
2018	Global Energy & Power Infrastructure Fund III, L.P.	7/3/2018	$54,700,000	$9,222,939	$435,992	$9,841,168	NM	NM
2018	Cardinal NR Sidecar Holdings L.P.	10/5/2018	$6,560,000	$6,600,399	$706,623	$7,429,931	NM	NM
2019	EQT Infrastructure IV (No.2) USD SCSp	12/20/2018	$63,500,000	$12,376,366	-	$12,374,698	NM	NM
2019	Ardian Infrastructure Fund V B	3/4/2019	$45,981,543	$2,096,815	$2	$1,799,516	NM	NM
2019	Global Infrastructure Partners IV-A/B, L.P.	3/11/2019	$72,100,000	$981,229	-	($38,397)	NM	NM
2019	Brookfield Infrastructure Fund IV, L.P.	5/10/2019	$62,000,000	$18,266,679	$2,658	$18,038,628	NM	NM
2019	EQT Infrastructure IV Co-Investment (Saber)	7/30/2019	$5,100,000	-	-	-	NM	NM
2019	Brookfield Infrastructure Fund IV (BIF IV): Co-invest	10/25/2019	$6,000,000	$6,000,000	-	$6,000,000	NM	NM
Total			**$874,417,954**	**$459,979,468**	**$107,256,785**	**$480,634,416**	**1.3x**	**12.9%**

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.


POLICE Monthly Infrastructure Cash Flow Summary
(as of May 31, 2020)
Amount
$15,000,000
$10,000,000
$5,000,000
$0
($5,000,000)
($10,000,000)
($15,000,000)
($20,000,000)
($25,000,000)
($30,000,000)
($35,000,000)
($40,000,000)
($45,000,000)
6/18
7/18
8/18
9/18
10/18
11/18
12/18
1/19
2/19
3/19
4/19
5/19
6/19
7/19
8/19
9/19
10/19
11/19
12/19
1/20
2/20
3/20
4/20
5/20
Contributions
Distributions
Net Cash Flow