



Monthly Performance Review *August 2020*

*Prepared for the New York City
Employees' Retirement System
10.2020*



TABLE OF CONTENTS

<i>Market Indicators for August & September.....</i>	<i>1</i>
<i>Contribution to Returns.....</i>	<i>6</i>
<i>Asset Allocation: Growth, Deflation, Inflation; New Policy Weights & Adjusted Policy Weight Mixes.....</i>	<i>7</i>
<i>Classification of Investments.....</i>	<i>13</i>
<i>NYCERS Market Values 2019-2020.....</i>	<i>17</i>
<i>NYCERS Market Values 2011-2020.....</i>	<i>18</i>
<i>Manager / Benchmark Comparison Report.....</i>	<i>19</i>
<i>Private Equity Fund Supplemental Details</i>	<i>33</i>
<i>Private Equity Cash Flow Tracker.....</i>	<i>35</i>
<i>Real Estate Fund Supplemental Details.....</i>	<i>36</i>
<i>Real Estate Cash Flow Tracker</i>	<i>37</i>
<i>Infrastructure Fund Supplemental Details</i>	<i>38</i>
<i>Infrastructure Cash Flow Tracker.....</i>	<i>39</i>

CITY OF NEW YORK
NYC Employees' Retirement System
Market Indicator Report
August 31, 2020



MARKET INDICATORS

	<u>1 Month</u>	<u>3 Month</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>2 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
S&P 500	7.19	15.48	13.23	21.94	12.03	14.52	14.46	15.16
S&P 400 MIDCAP	3.51	9.65	8.29	4.22	(1.25)	5.38	8.11	12.05
RUSSELL 1000	7.34	16.14	13.63	22.50	12.05	14.58	14.31	15.19
RUSSELL 2000	5.63	12.40	8.56	6.02	(3.90)	5.03	7.65	11.53
RUSSELL 3000	7.24	15.93	13.33	21.44	10.92	13.95	13.86	14.94
RUSSELL 3000 GROWTH	10.07	23.38	18.27	42.59	21.24	23.29	19.95	18.68
RUSSELL 3000 VALUE	4.21	7.71	8.21	0.39	(0.09)	4.11	7.33	10.89
MSCI EAFE NET	5.14	11.26	7.59	6.13	1.33	2.34	4.72	5.88
MSCI EMF NET	2.21	19.53	11.34	14.49	4.64	2.83	8.66	3.76
FTSE CUSTOM NYCERS	(0.50)	16.96	8.85	3.30	(0.53)	(0.70)	6.21	2.72
MSCI WORLD NET	6.68	14.74	11.79	16.79	8.21	9.82	10.42	10.74
MSCI EUROPE SMID CAP NET	6.60	16.13	12.97	12.82	1.05	2.95	5.87	8.45
MSCI AC WORLD ex US NET	4.28	13.85	8.93	8.31	2.36	2.63	5.75	5.26
FTSE ALL WORLD EX US	4.44	13.87	8.99	9.08	2.93	3.22	6.31	5.88
MSCI World ex USA IMI NR	5.46	11.90	8.44	6.65	1.31	2.49	5.10	5.91
1 YEAR TREASURY BILL YIELD + 4%	0.32	1.08	0.71	6.46	6.80	6.26	5.64	4.99
HFRI FUND OF FUNDS COMPOSITE + 1%	2.16	6.81	4.60	6.55	3.84	4.15	3.78	4.18
NYC - TREASURY AGENCY PLUS FIVE	(2.32)	0.10	(0.04)	10.19	13.48	7.81	6.03	5.04
FTSE USBIG Treasury 1-3 Y Index	(0.01)	0.11	0.08	3.43	3.89	2.56	1.85	1.28
FTSE USBIG Treasury/Agency 1-10 y	(0.19)	0.21	0.12	5.42	6.40	3.80	2.88	2.32
FTSE Treasury 10+	(4.32)	(0.13)	(0.27)	12.99	18.50	10.94	8.47	7.04

MARKET INDICATORS

	<u>1 Month</u>	<u>3 Month</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>2 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
FTSE MORTGAGE INDEX	0.02	0.12	0.16	4.70	5.98	3.75	3.19	3.01
NYC - INVESTMENT GRADE CREDIT	(1.36)	3.64	1.74	7.09	9.94	6.20	5.85	4.93
FTSE BIG (DAILY)	(0.89)	1.34	0.66	6.55	8.42	5.17	4.38	3.65
NYC - CORE PLUS FIVE	(1.12)	1.66	0.81	7.18	9.48	5.81	5.03	4.28
BARCLAYS AGGREGATE	(0.81)	1.31	0.67	6.47	8.31	5.09	4.33	3.65
FTSE BB & B	0.86	6.59	5.95	4.46	5.86	4.91	6.10	6.59
FTSE BB & B CAPPED	0.94	6.28	5.87	3.75	5.45	4.62	5.87	6.42
ICE BofA US High Yield Index	0.98	6.84	5.81	3.71	5.13	4.51	6.28	6.70
ICE BofA US High Yield Constrained	1.00	6.80	5.79	3.62	5.09	4.48	6.27	6.68
CSFB LEVERAGED LOAN	1.50	4.81	3.41	0.57	1.96	3.06	3.75	4.50
BARCLAYS GLOBAL US TIPS	1.09	4.57	3.42	8.99	8.22	5.70	4.57	3.68
ICE BofA US Convertibles - Yield Alter	3.37	10.13	7.42	9.71	6.85	6.91	6.31	5.80
ICE BofA All IG US Convertibles	1.91	6.82	6.89	5.10	7.60	9.74	12.09	11.13
ICE BofA All US Conv Ex Mandatory	9.49	23.87	17.43	37.71	19.68	18.24	15.05	13.08
DJ US SELECT REAL ESTATE	0.70	5.96	4.05	(17.67)	(4.73)	(0.72)	3.30	7.80
NCREIF NFI - ODCE NET*	0.00	(1.75)	0.00	1.33	3.37	4.72	6.35	9.78
CPI + 4%	0.70	2.53	1.62	5.37	5.59	5.99	5.83	

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

CITY OF NEW YORK
NYC Employees' Retirement System
Market Indicator Report
August 31, 2020



MARKET INDICATORS

	<u>1 Month</u>	<u>3 Month</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>2 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
91 DAY TREASURY BILL	0.01	0.04	0.03	1.26	1.81	1.72	1.20	0.64

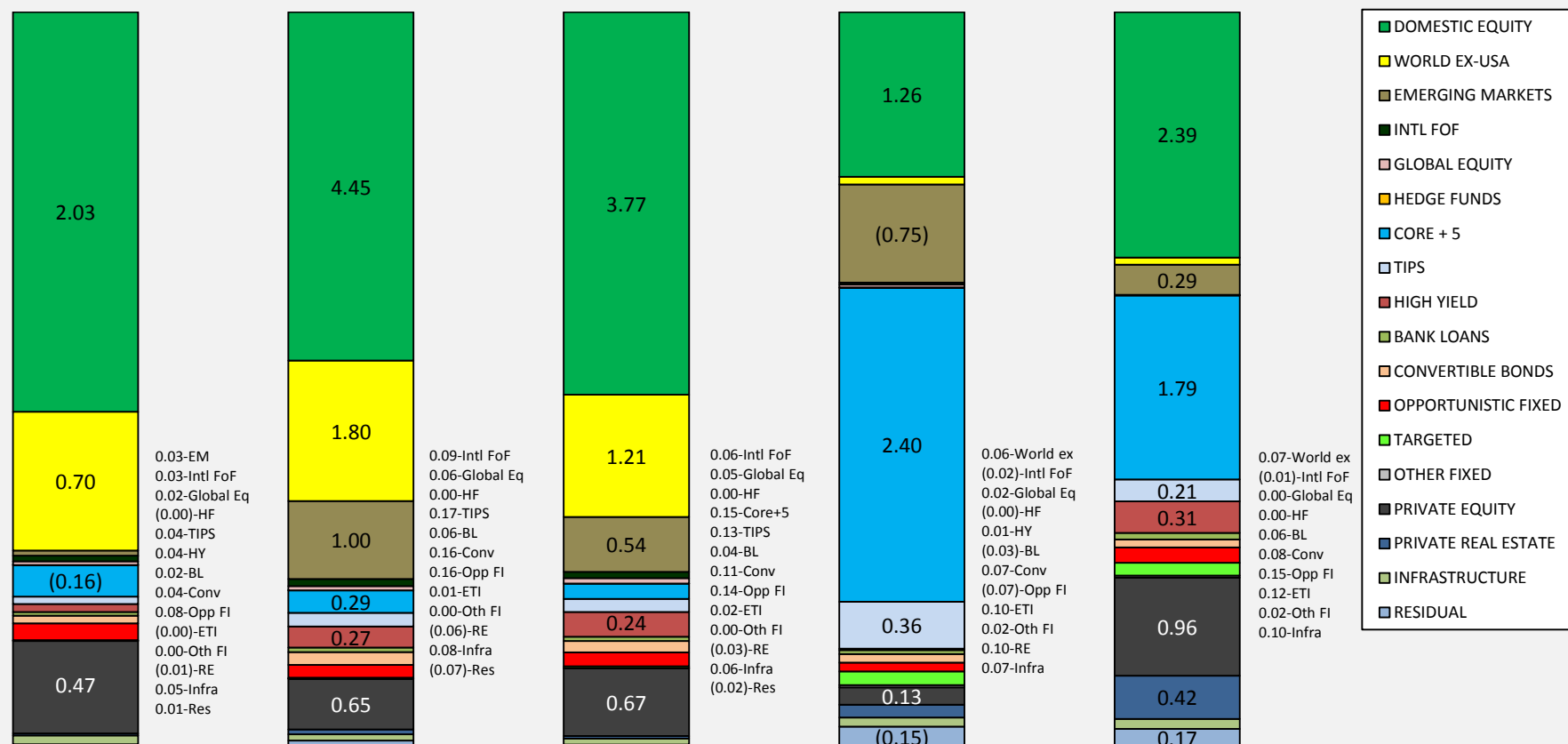
MARKET INDICATORS

	<u>1 Month</u>	<u>3 Month</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>2 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
S&P 500	(3.80)	8.93	8.93	15.15	9.57	12.28	14.15	13.74
S&P 400 MIDCAP	(3.25)	4.77	4.77	(2.16)	(2.33)	2.90	8.11	10.49
RUSSELL 1000	(3.65)	9.47	9.47	16.01	9.78	12.38	14.09	13.76
RUSSELL 2000	(3.34)	4.93	4.93	0.39	(4.36)	1.77	8.00	9.85
RUSSELL 3000	(3.64)	9.21	9.21	15.00	8.79	11.65	13.69	13.48
RUSSELL 3000 GROWTH	(4.57)	12.86	12.86	36.12	18.24	20.73	19.51	16.91
RUSSELL 3000 VALUE	(2.58)	5.42	5.42	(5.67)	(1.38)	2.11	7.43	9.75
MSCI EAFE NET	(2.60)	4.80	4.80	0.49	(0.43)	0.62	5.26	4.62
MSCI EMF NET	(1.60)	9.56	9.56	10.54	4.07	2.42	8.97	2.50
FTSE CUSTOM NYCERS	(0.48)	8.33	8.33	(0.13)	(0.49)	(0.47)	6.72	1.51
MSCI WORLD NET	(3.45)	7.93	7.93	10.41	6.03	7.74	10.48	9.37
MSCI EUROPE SMID CAP NET	(2.64)	9.98	9.98	7.13	0.39	0.87	6.11	6.79
MSCI AC WORLD ex US NET	(2.46)	6.25	6.25	3.00	0.86	1.16	6.23	4.00
FTSE ALL WORLD EX US	(2.27)	6.52	6.52	3.83	1.49	1.80	6.81	4.61
MSCI World ex USA IMI NR	(2.58)	5.64	5.64	1.10	(0.28)	0.73	5.60	4.65
1 YEAR TREASURY BILL YIELD + 4%	0.37	1.09	1.09	6.33	6.80	6.27	5.63	4.99
HFRI FUND OF FUNDS COMPOSITE + 1%	(0.26)	4.38	4.38	6.64	3.76	3.87	4.09	3.90
NYC - TREASURY AGENCY PLUS FIVE	0.30	0.26	0.26	12.33	14.70	8.48	5.80	5.11
FTSE USBIG Treasury 1-3 Y Index	0.02	0.10	0.10	3.56	3.95	2.63	1.79	1.26
FTSE USBIG Treasury/Agency 1-10 y	0.07	0.20	0.20	5.96	6.71	4.02	2.75	2.30
FTSE Treasury 10+	0.39	0.12	0.12	16.35	20.53	11.88	8.24	7.26

MARKET INDICATORS

	<u>1 Month</u>	<u>3 Month</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>2 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
FTSE MORTGAGE INDEX	(0.08)	0.07	0.07	4.48	6.26	3.80	3.05	3.05
NYC - INVESTMENT GRADE CREDIT	(0.16)	1.57	1.57	7.68	10.07	6.22	5.75	4.87
FTSE BIG (DAILY)	(0.02)	0.64	0.64	7.11	8.76	5.32	4.25	3.65
NYC - CORE PLUS FIVE	(0.04)	0.78	0.78	7.83	9.90	5.98	4.89	4.29
BARCLAYS AGGREGATE	(0.05)	0.62	0.62	6.98	8.63	5.24	4.18	3.64
FTSE BB & B	(1.31)	4.56	4.56	2.78	4.90	4.15	6.43	6.15
FTSE BB & B CAPPED	(1.20)	4.61	4.61	2.19	4.56	3.92	6.18	6.02
ICE BofA US High Yield Index	(1.04)	4.71	4.71	2.30	4.28	3.83	6.61	6.28
ICE BofA US High Yield Constrained	(1.04)	4.70	4.70	2.22	4.24	3.81	6.60	6.27
CSFB LEVERAGED LOAN	0.69	4.13	4.13	0.84	1.97	3.16	4.03	4.44
BARCLAYS GLOBAL US TIPS	(0.37)	3.03	3.03	10.08	8.59	5.79	4.61	3.57
ICE BofA US Convertibles - Yield Alter	(0.93)	6.42	6.42	7.42	6.37	6.30	6.61	5.38
ICE BofA All IG US Convertibles	(1.51)	5.27	5.27	1.01	7.16	8.66	12.03	10.56
ICE BofA All US Conv Ex Mandatory	(2.41)	14.61	14.61	35.02	18.39	16.54	15.21	12.20
DJ US SELECT REAL ESTATE	(3.10)	0.83	0.83	(22.33)	(4.91)	(1.85)	1.99	6.99
91 DAY TREASURY BILL	0.01	0.04	0.04	1.10	1.74	1.69	1.20	0.64

NYC Employees' Retirement System Contribution to Return - August 2020



1 Month - Total Fund
Return: 3.37%

3 Months - Total Fund
Return: 9.12%

FYTD - Total Fund
Return: 7.14%

FY Ending 6/30/20 Total
Return: 3.58%

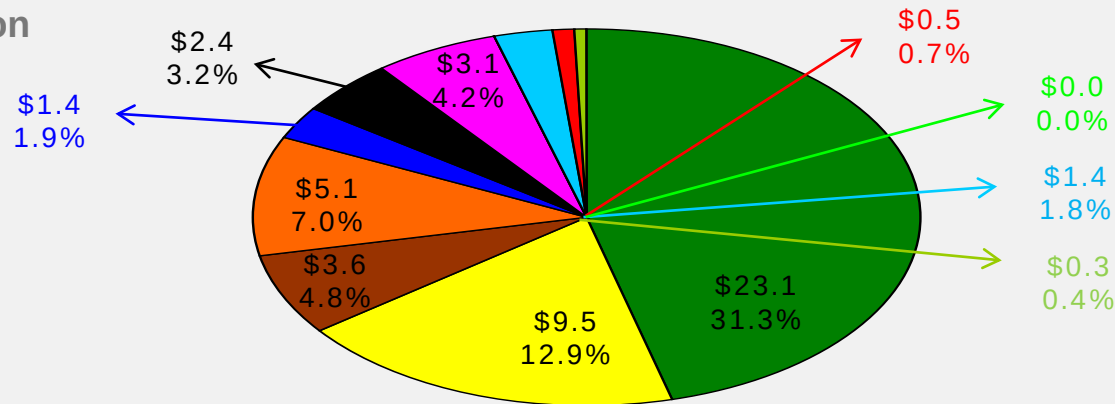
FY Ending 6/30/19 Total
Return: 7.13%

Prepared by State Street

Portfolio Asset Allocation – Growth : August 31, 2020

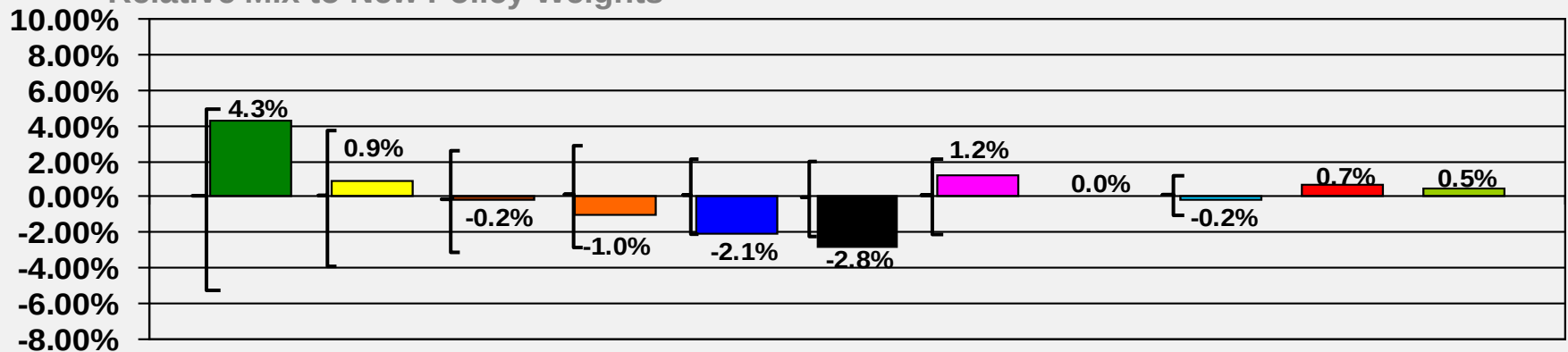
\$73.7B Under Management

Asset Allocation



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

Relative Mix to New Policy Weights

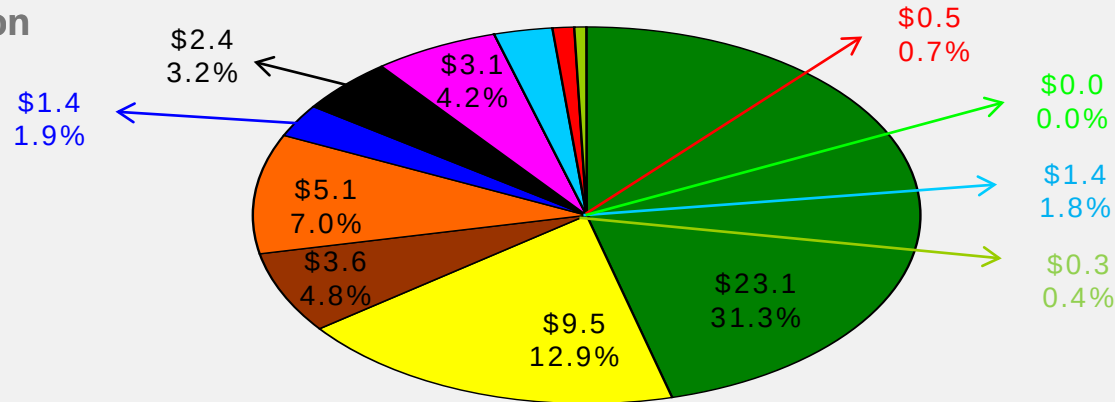


Note: Brackets represent rebalancing ranges versus Policy.

Portfolio Asset Allocation – Growth : August 31, 2020

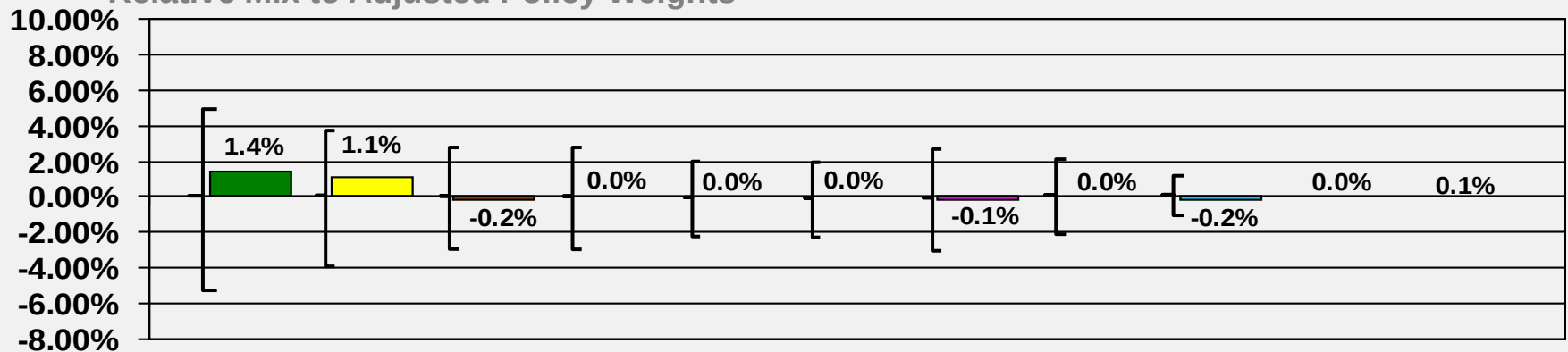
\$73.7B Under Management

Asset Allocation



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

Relative Mix to Adjusted Policy Weights

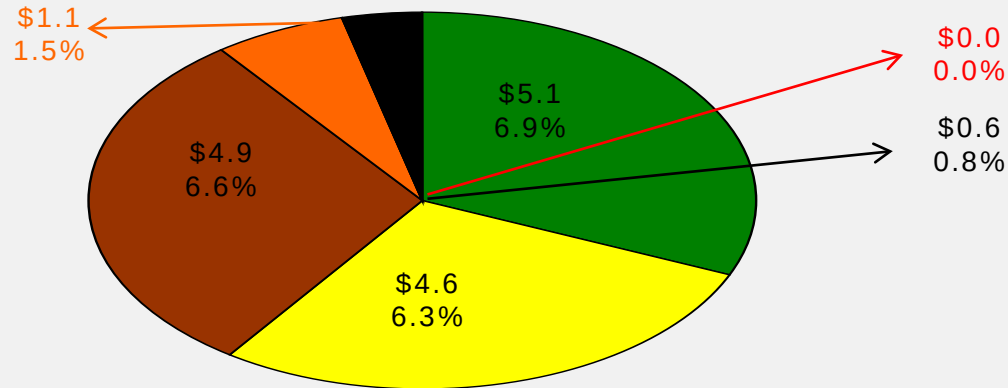


Note: Brackets represent rebalancing ranges versus Policy.

Portfolio Asset Allocation – Deflation Protection : August 31, 2020

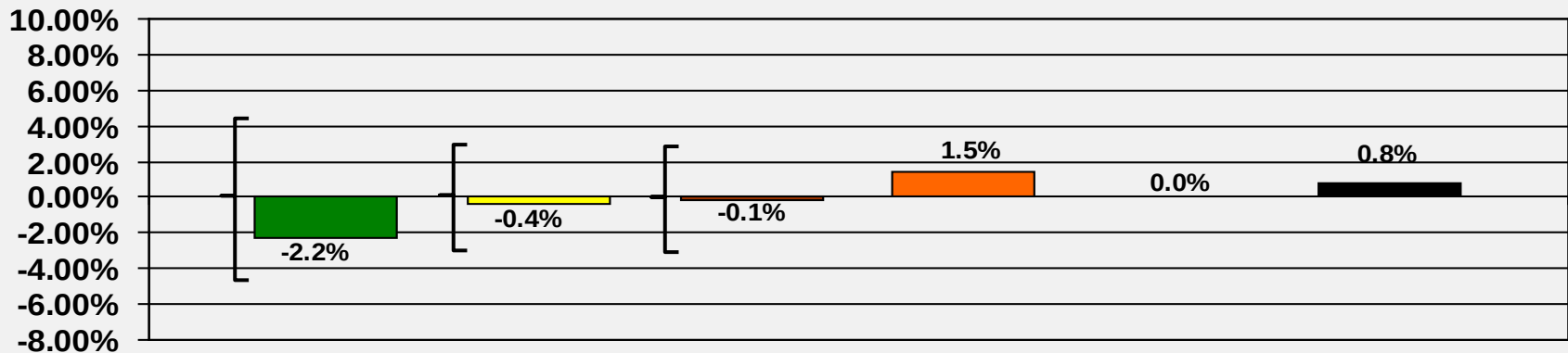
\$73.7B Under Management

Asset Allocation



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

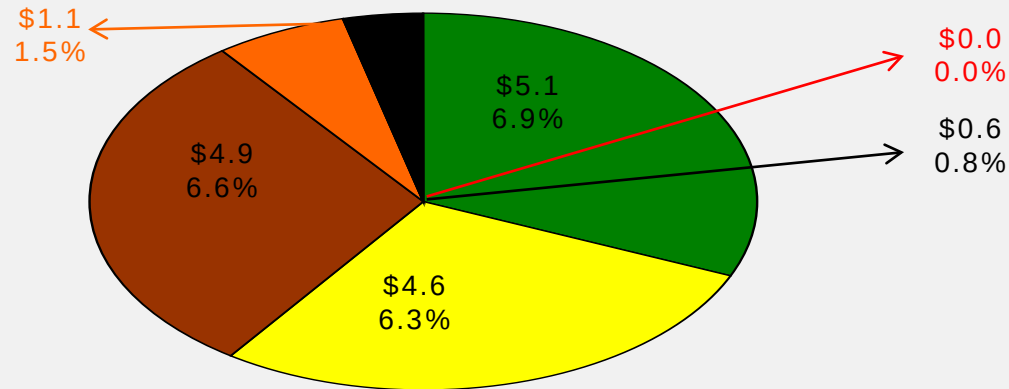
Relative Mix to New Policy Weights



Portfolio Asset Allocation – Deflation Protection : August 31, 2020

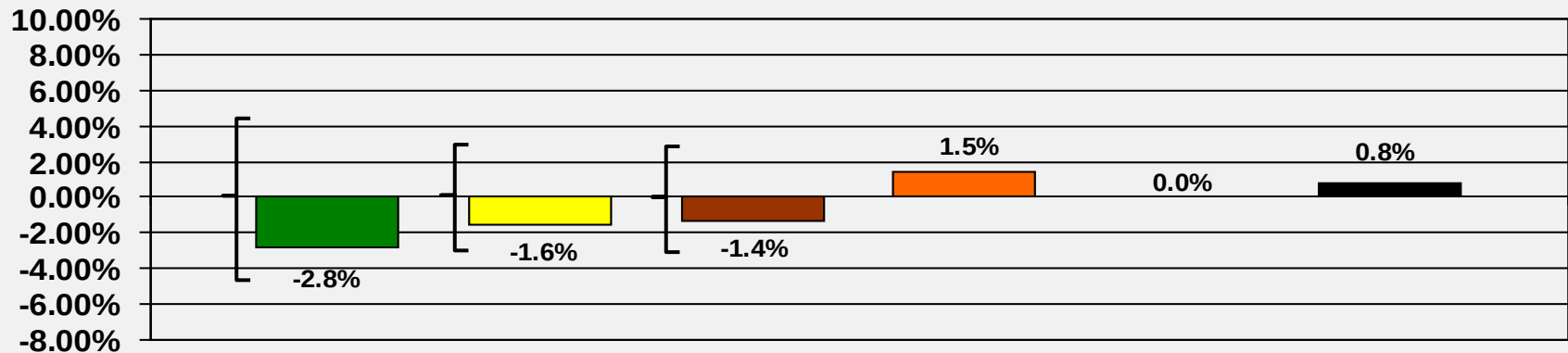
\$73.7B Under Management

Asset Allocation



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

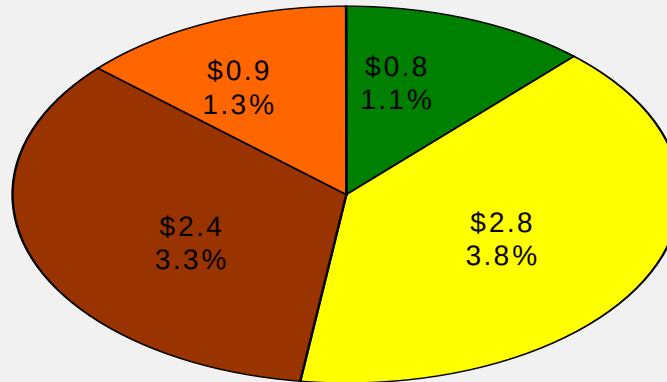
Relative Mix to Adjusted Policy Weights



Portfolio Asset Allocation – Inflation Protection : August 31, 2020

\$73.7B Under Management

Asset Allocation



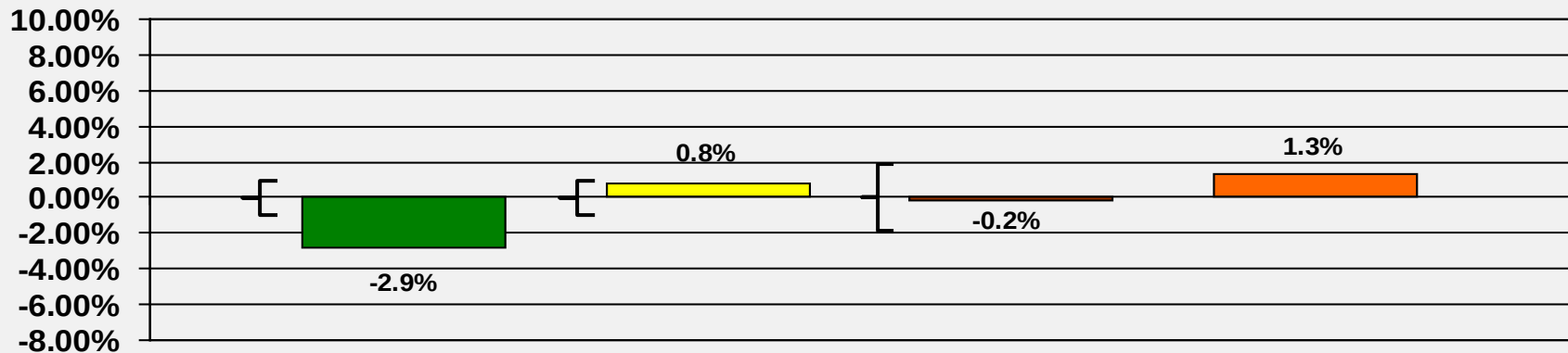
Infrastructure

US TIPS

Real Estate - Core

Bank Loans

Relative Mix to New Policy Weights

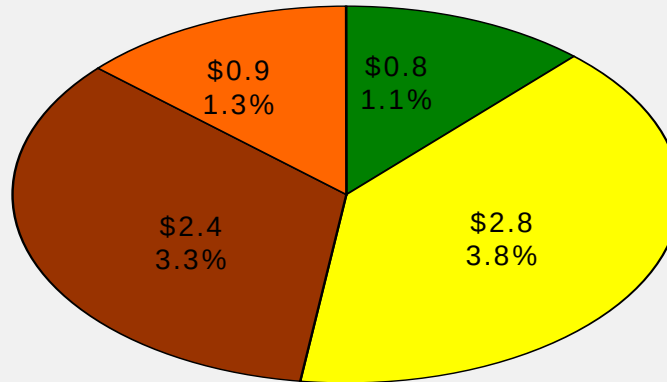


Note: Brackets represent rebalancing ranges versus Policy.

Portfolio Asset Allocation – Inflation Protection : August 31, 2020

\$73.7B Under Management

Asset Allocation



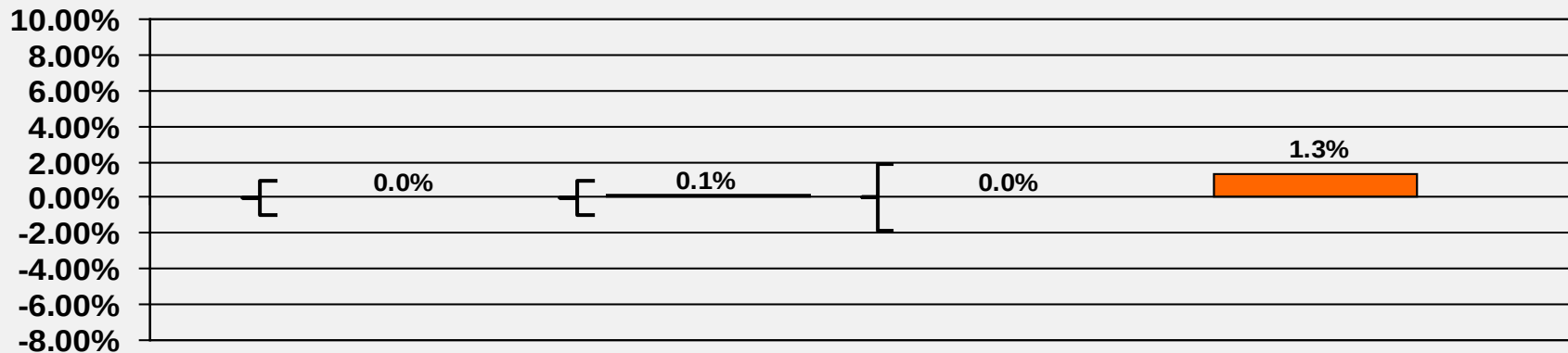
Infrastructure

US TIPS

Real Estate - Core

Bank Loans

Relative Mix to Adjusted Policy Weights



Note: Brackets represent rebalancing ranges versus Policy.

NYC EMPLOYEES' RETIREMENT SYSTEM
CLASSIFICATION OF INVESTMENTS
(as of August 31st, 2020)

13

ASSET CLASS ALLOCATIONS	In \$MM	Actual	Policy Target	Adjustment	Adjusted Policy	Adjusted Target Range ***
TOTAL EQUITIES	\$46,811.4	63.5%	63.5%	NA	61.1%	56.1% - 66.1%
TOTAL FIXED INCOME	\$26,872.4	36.5%	33.3%	NA	26.5%	21.5% - 31.5%
TOTAL ASSETS	\$73,683.8	100.0%	96.8%	NA	87.6%	

	In \$MM	Actual	Policy Target	Adjustment	Adjusted Policy	Adjusted Target Range ***
US Equities	\$23,088.4	31.3%	27.0%	2.1%	29.1%	24.1% - 34.1%
Non-US Equities/EAFE	\$9,491.0	12.9%	12.0%	0.5%	12.5%	8.5% - 16.5%
Emerging Markets	\$3,565.0	4.8%	5.0%	0.1%	5.1%	2.1% - 8.1%
Non-US Emerging Mgrs. FoF	\$504.1	0.7%	0.0%	NA	0.0%	-
Global Equity	\$331.4	0.4%	0.0%	NA	0.0%	-
TOTAL PUBLIC EQUITY	\$36,980.0	50.2%	44.0%	2.7%	46.7%	
* HEDGE FUNDS	\$3.6	0.0%	0.0%	NA	0.0%	0.0% - 0.0%
* REAL ESTATE - CORE	\$2,426.1	3.3%	3.5%	NA	3.3%	1.3% - 3.5%
* REAL ESTATE - OPPORTUNISTIC	\$1,433.0	1.9%	4.0%	NA	1.9%	-0.1% - 4.0%
* PRIVATE EQUITY	\$5,125.7	7.0%	8.0%	NA	8.0%	5.0% - 11.0%
PRIVATE INFRASTRUCTURE	\$843.0	1.1%	4.0%	NA	1.1%	3.0% - 5.0%
TOTAL EQUITIES	\$46,811.4	63.5%	63.5%	NA	61.1%	56.1% - 66.1%

	In \$MM	Actual	Policy Target	Adjustment	Adjusted Policy	Adjusted Target Range ***
U.S. Treasuries – All Maturities	\$5,099.3	6.9%	9.2%	NA	0.0%	4.2% - 14.2%
U.S. Treasuries - Longer Than Five Years	\$0.0	0.0%	0.0%	0.6%	0.6%	-5.0% - 5.0%
Core Mortgage-Backed Securities	\$3,651.1	5.0%	4.6%	1.2%	5.8%	3.6% - 5.6%
Credit - Investment Grade Corporates	\$4,872.9	6.6%	3.5%	1.2%	4.7%	2.5% - 4.5%
High Yield	\$3,126.7	4.2%	3.0%	1.4%	4.4%	1.4% - 7.4%
Bank Loans	\$932.3	1.3%	0.0%	NA	0.0%	0.0% - 1.5%
Total High Yield & Bank Loans	\$4,059.0	5.5%	3.0%	1.4%	4.4%	1.4% - 7.4%
TIPS	\$2,818.4	3.8%	3.0%	0.7%	3.7%	2.7% - 4.0%
Convertible Bonds	\$1,355.3	1.8%	2.0%	NA	2.0%	2.0% - 2.0%
**ETI	\$955.0	1.3%	2.0%	NA	2.0%	1.0% - 3.0%
Cash	\$1,069.3	1.5%	0.0%	NA	0.0%	0.0% - 0.0%
TOTAL PUBLIC FIXED INCOME	\$23,880.3	32.4%	27.3%	NA	23.3%	
* OPPORTUNISTIC FIXED INCOME	\$2,380.7	3.2%	6.0%	NA	3.2%	4.0% - 8.0%
OTHER FIXED INCOME	\$611.4	0.8%	0.0%	NA	0.0%	0.0% - 0.0%
TOTAL FIXED INCOME	\$26,872.4	36.5%	33.3%	NA	26.5%	21.5% - 31.5%

* 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: +/-4%; Emerging Markets: +/-3%; Real Estate Core: +/-2%; Real Estate Opportunistic: +/-2%; Private Equity: +/-3%; US Treasuries All Maturities: +/-5%; US Treasuries Longer than 5 Years: +/-5%; Mortgage Backed Securities: +/-1%; Investment Grade Corporates: +/-1%; TIPS: +/-1%; High Yield: +/-3%; Bank Loans: +/-1%; OFI: +/-2%.

NYC EMPLOYEES' RETIREMENT SYSTEM

CLASSIFICATION OF INVESTMENTS

(as of August 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.

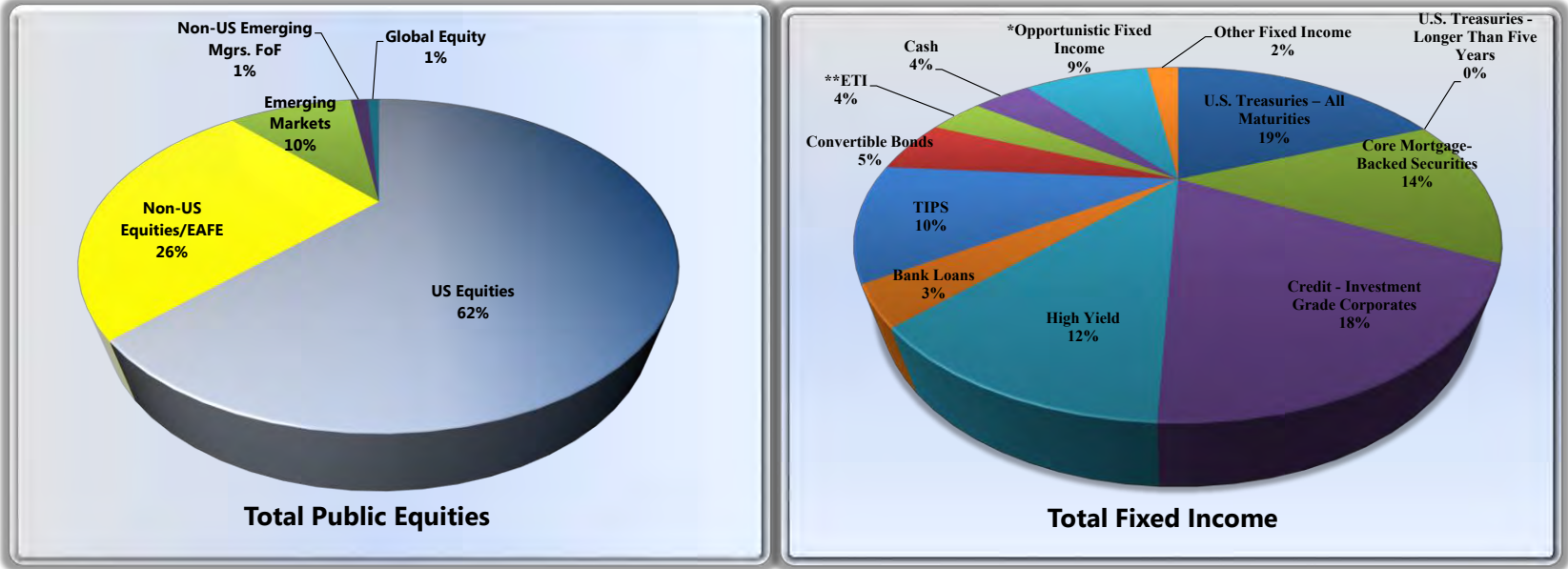
Impact of Adjustments

1) U.S. Treasuries - Longer Than Five Years	0.0%
Adjustment: Adjustment: 12% of uninvested Real Estate Core	0.0%
Adjustment: Adjustment: 8% of uninvested Real Estate Opportunistic	0.2%
Adjustment: Adjustment: 5% of uninvested Private Infrastructure	0.1%
Adjustment: Adjustment: 10% of uninvested Opportunistic Fixed Income	0.3%
Total U.S. Treasuries - Longer Than Five Years	0.6%
2) Credit - Investment Grade Corporates	6.7%
Adjustment: 24% of uninvested Real Estate Core	0.0%
Adjustment: 16% of uninvested Real Estate Opportunistic	0.3%
Adjustment: 10% of uninvested Private Infrastructure	0.3%
Adjustment: 20% of uninvested Opportunistic Fixed Income	0.6%
Total Credit - Investment Grade Corporates	8.0%
3) Core Mortgage-Backed Securities	4.6%
Adjustment: 24% of uninvested Real Estate Core	0.0%
Adjustment: 16% of uninvested Real Estate Opportunistic	0.3%
Adjustment: 10% of uninvested Private Infrastructure	0.3%
Adjustment: 20% of uninvested Opportunistic Fixed Income	0.6%
Total Core Mortgage-Backed Securities	5.8%

NYC EMPLOYEES' RETIREMENT SYSTEM **CLASSIFICATION OF INVESTMENTS** **(as of August 31st, 2020)**

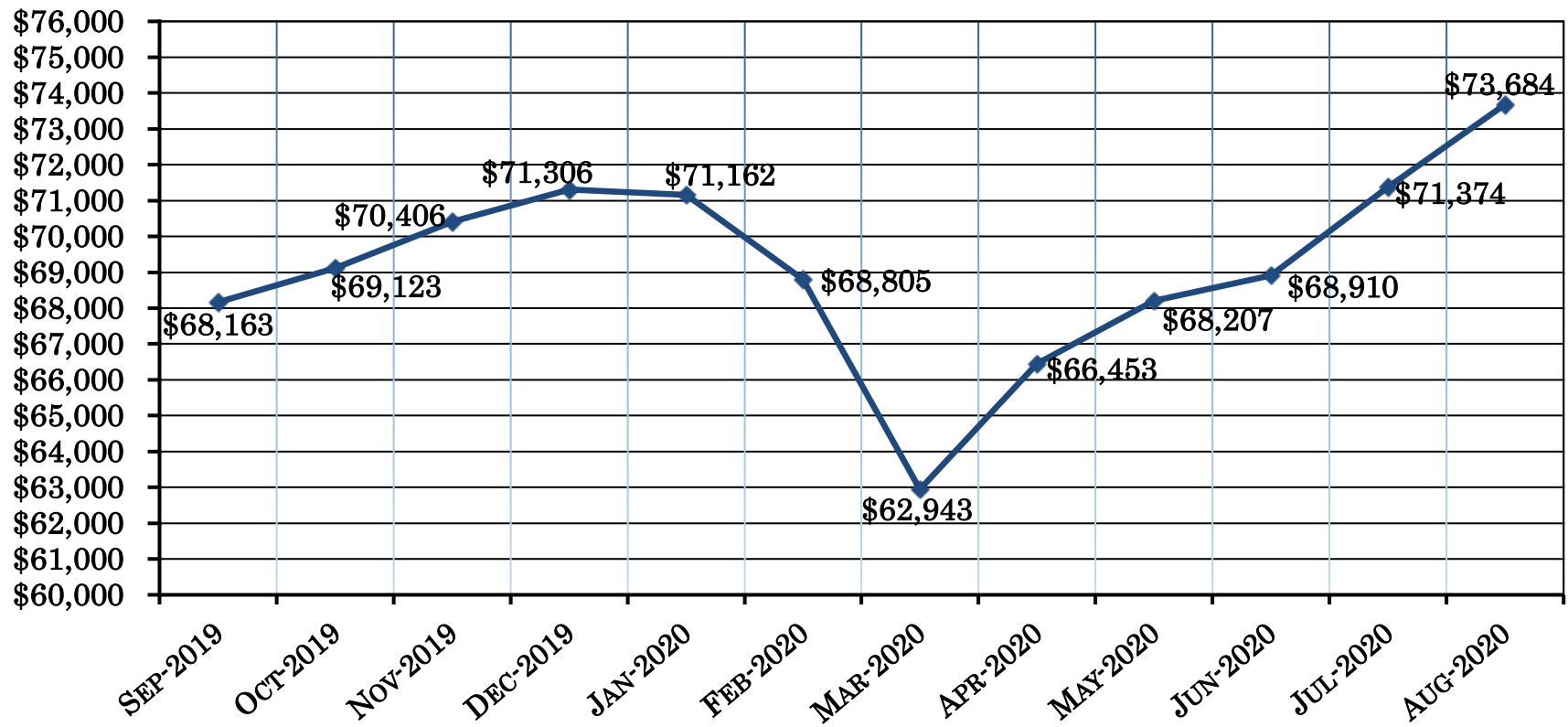
4) Treasury Inflation Protected Securities	3.0%
Adjustment: 25% of uninvested Private Infrastructure	0.7%
Total Treasury Inflation Protected Securities	3.7%
 5) High Yield Securities	 3.0%
Adjustment: 50% of uninvested Opportunistic Fixed Income	1.4%
** Existing Convertibles holdings to be placeholder for HY Securities	0.0%
Total High Yield Securities	4.4%
 6) Domestic Equity	 27.0%
Adjustment: 100% of uninvested Private Equity	0.0%
Adjustment: 60% of uninvested Real Estate Opportunistic	1.2%
Adjustment: 27% of uninvested Private Infrastructure	0.8%
Adjustment: 40% of uninvested of uninvested Real Estate Core	0.1%
Total Domestic Equity	29.1%
 7) Non-U.S. Equity - Developed Markets	 12.0%
Adjustment: 18% of uninvested Private Infrastructure	0.5%
Total Non-U.S. Equity - Developed Markets	12.5%
 8) Non-U.S. Equity - Emerging Markets	 5.0%
Adjustment: 5% of uninvested Private Infrastructure	0.1%
Total Non-U.S. Equity - Emerging Markets	5.1%

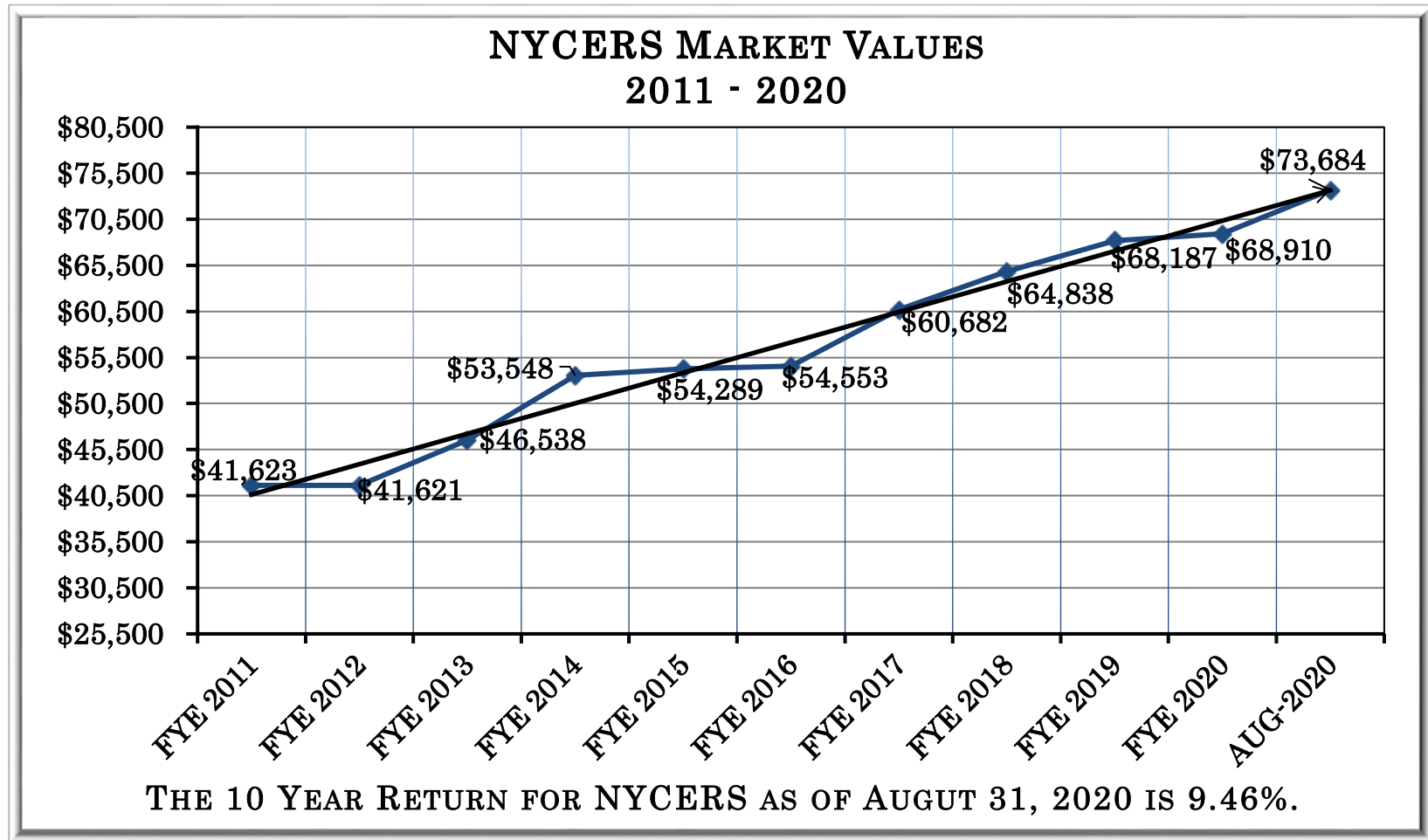
NYC EMPLOYEES' RETIREMENT SYSTEM
CLASSIFICATION OF INVESTMENTS
(as of August 31st, 2020)



Note: Totals may not equal 100% due to rounding

NYCERS MARKET VALUES SEPTEMBER 2019 - AUGUST 2020





New York City Employees' Retirement System

Manager / Benchmark Comparison Report

Rates of Return - Net Mgr



Periods Ending August 31, 2020

	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	FYTD	CYTD	FYE 6/30/20	FYE 06/30/19	CYE 12/31/19	CYE 12/31/18	Trailing 1 Year	Trailing 3 Year	Inception Date
ASSET CLASS SUMMARY													
NYCERS-TOTAL DOMESTIC EQUITY	23,088.45	31.33	6.68	14.86	12.54	6.58	4.25	8.37	29.95	(5.41)	18.17	12.75	Aug-01-79
NYCERS-TOTAL WORLD ex-USA	9,491.04	12.88	5.58	14.39	9.59	1.86	0.49	0.57	25.28	(14.11)	14.99	5.80	Apr-01-04
NYCERS-TOTAL EMERGING MARKETS	3,564.98	4.84	0.49	18.67	10.20	(7.11)	(11.51)	4.06	14.78	(14.23)	4.58	(1.17)	Sep-01-05
NYCERS-TOTAL INTL FOF	504.08	0.68	4.25	13.51	9.38	(1.24)	(2.25)	(0.81)	25.04	(16.27)	10.75	3.29	May-01-17
NYCERS-TOTAL GLOBAL EQUITY	331.43	0.45	4.33	12.67	11.96	7.74	5.24		34.10		18.92		Aug-01-18
NYCERS-TOTAL HEDGE FUNDS	3.57	0.00	(0.05)	1.65	1.70	(20.32)	(17.51)	3.59	9.08	5.87	(21.16)	(2.77)	Jul-01-11
NYCERS-TOTAL CORE FI- DEVELOPING MGRS	611.40	0.83	(0.32)	2.71	1.47	6.99	8.15	7.93	9.70	(1.05)	7.01	5.13	May-01-09
NYCERS-TOTAL STRUCTURED	13,623.32	18.49	(0.82)	1.36	0.72	10.49	12.34	8.45	9.28	(0.37)	8.70	6.40	Jan-01-85
NYCERS-TOTAL CONVERTIBLE BONDS	1,355.27	1.84	2.11	9.10	6.04	5.32	5.46	6.59	15.95	(0.69)	11.49	7.93	Jun-01-08
NYCERS-TOTAL TIPS MANAGERS	2,818.42	3.83	0.96	4.40	3.25	9.43	8.24	4.82	8.44	(1.27)	8.74	5.64	Jun-01-05
NYCERS-TOTAL HIGH YIELD	3,126.69	4.24	0.94	6.21	5.67	1.72	0.27	7.29	14.38	(2.69)	4.65	4.63	Oct-01-94
NYCERS-TOTAL BANK LOANS	932.27	1.27	1.30	3.68	2.90	(1.78)	(1.77)	3.53	8.00	0.66	0.42	2.75	Dec-01-12
NYCERS-TOTAL OPPORTUNISTIC FIXED	2,380.72	3.23	2.58	4.86	4.07	(0.54)	(2.01)	5.08	5.32	6.32	0.39	4.11	Oct-01-07
NYCERS-TOTAL CORE FI- EMERGING MGRS	0.00	0.00						7.92	8.95	(0.03)			Jan-01-92
TOTAL EMPLOYEES ETI (w/o cash)	955.01	1.30	(0.27)	1.02	1.45	6.87	7.72	9.71	9.11	0.98	5.86	5.39	Dec-01-84
NYCERS-TOTAL PRIVATE REAL ESTATE	3,859.10	5.24	(0.18)	(1.07)	(0.50)	(1.63)	1.81	7.88	6.25	10.22	0.61	5.92	Apr-01-04
NYCERS-TOTAL INFRASTRUCTURE	843.04	1.14	4.06	7.15	5.08	4.49	6.15	11.83	11.98	14.49	8.26	10.73	Dec-01-13
NYCERS-TOTAL PRIVATE EQUITY	5,125.67	6.96	6.97	9.55	9.85	4.73	1.83	13.54	11.30	16.05	7.84	12.08	Apr-01-04
NYCERS-TOTAL CASH	1,069.35	1.45	0.03	0.12	0.10	1.88	2.46	3.29	2.52	2.49	2.13	2.51	Apr-01-04
SECURITY LENDING	0.00	0.00											Apr-01-04
NYCERS-TOTAL EMPLOYEES	73,683.81	100.00	3.37	9.12	7.14	4.51	3.58	7.13	17.60	(2.70)	10.82	7.93	Jul-01-87
NYCERS-TOTAL EQUITY	36,979.99	50.19	5.70	15.20	11.53	3.49	0.98	5.69	26.49	(9.24)	15.52	8.82	Aug-01-93
NYCERS-TOTAL FIXED INCOME (MINUS SS)	25,803.10	35.02	0.15	3.01	2.27	7.26	7.79	7.30	9.55	(0.06)	7.01	5.67	Apr-01-04
NYCERS-TOTAL HEDGE FUNDS	3.57	0.00	(0.05)	1.65	1.70	(20.32)	(17.51)	3.59	9.08	5.87	(21.16)	(2.77)	Jul-01-11
NYCERS-TOTAL PRIVATE EQUITY	5,125.67	6.96	6.97	9.55	9.85	4.73	1.83	13.54	11.30	16.05	7.84	12.08	Apr-01-04
NYCERS-TOTAL PRIVATE REAL ESTATE	3,859.10	5.24	(0.18)	(1.07)	(0.50)	(1.63)	1.81	7.88	6.25	10.22	0.61	5.92	Apr-01-04
NYCERS-TOTAL INFRASTRUCTURE	843.04	1.14	4.06	7.15	5.08	4.49	6.15	11.83	11.98	14.49	8.26	10.73	Dec-01-13
NYCERS-TOTAL CASH	1,069.35	1.45	0.03	0.12	0.10	1.88	2.46	3.29	2.52	2.49	2.13	2.51	Apr-01-04
SECURITY LENDING	0.00	0.00											Apr-01-04
NYCERS-TOTAL EMPLOYEES	73,683.81	100.00	3.37	9.12	7.14	4.51	3.58	7.13	17.60	(2.70)	10.82	7.93	Jul-01-87
Employees Policy Benchmark			3.36	8.81	7.90	5.12	3.70	7.73	18.42	(2.75)	12.02	8.33	Jun-01-94

New York City Employees' Retirement System

Manager / Benchmark Comparison Report

Rates of Return - Net Mgr



Periods Ending August 31, 2020

	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/20	FYE 6/30/2019	CYE 12/31/2019	CYE 12/31/2018	Inception Date
ASSET CLASS SUMMARY												
NYCERS-TOTAL EMPLOYEES	73,684	100.00	3.37	9.12	10.82	7.14	4.51	3.58	7.13	17.60	(2.70)	07/01/1987
Employees Policy Benchmark			3.36	8.81	12.02	7.90	5.12	3.70	7.73	18.42	(2.75)	07/01/1987
Excess			0.02	0.31	(1.20)	(0.75)	(0.61)	(0.12)	(0.60)	(0.81)	0.04	
NYCERS-TOTAL EQUITY (INCL ALTS)	46,811	63.53	5.30	12.92	13.09	10.14	3.10	1.16	6.89	22.54	(4.74)	04/01/2004
NYCERS-TOTAL FIXED INCOME	26,872	36.47	0.15	2.94	6.83	2.22	7.07	7.61	7.21	9.43	(0.02)	02/01/1980
EQUITY SUMMARY												
NYCERS-TOTAL DOMESTIC EQUITY	23,088	31.33	6.68	14.86	18.17	12.54	6.58	4.25	8.37	29.95	(5.41)	08/01/1979
RUSSELL 3000 (DAILY)			7.24	15.93	21.44	13.33	9.39	6.53	8.98	31.02	(5.24)	08/01/1979
Excess			(0.56)	(1.07)	(3.27)	(0.80)	(2.82)	(2.28)	(0.61)	(1.07)	(0.17)	
BlackRock US SCG R2000	110	0.15	5.86	13.74	17.08	9.50	6.02	3.39	(0.40)	28.51	(9.18)	10/01/2013
RUSSELL 2000 GROWTH DAILY			5.87	13.71	17.28	9.50	6.15	3.48	(0.49)	28.48	(9.31)	10/01/2013
Excess			(0.01)	0.03	(0.20)	0.00	(0.13)	(0.09)	0.09	0.03	0.12	
BlackRock US SCV R2000	148	0.20	5.44	10.63	(5.60)	7.59	(17.89)	(16.94)	(6.08)	23.52	(12.77)	10/01/2013
RUSSELL 2000 VALUE DAILY			5.39	10.68	(6.14)	7.56	(17.71)	(17.48)	(6.24)	22.39	(12.86)	10/01/2013
Excess			0.06	(0.05)	0.55	0.03	(0.17)	0.54	0.15	1.13	0.09	
RAFI US SCE	0	0.00							(6.39)	20.92	(11.31)	07/01/2008
RUSSELL 2000 (DAILY)			5.63					(6.63)	(3.31)	25.52	(11.01)	07/01/2008
Excess									(3.08)	(4.60)	(0.29)	
Ceredex US SCV	0	0.00							(3.49)	18.66	(11.97)	01/01/2013
RUSSELL 2000 VALUE DAILY			5.39					(17.48)	(6.24)	22.39	(12.86)	01/01/2013
Excess									2.74	(3.74)	0.89	
Cooke and Bieler-US SCV	80	0.11	3.85	9.29		4.93	(12.21)					01/01/2020
RUSSELL 2000 VALUE DAILY			5.39	10.68		7.56	(17.71)					01/01/2020
Excess			(1.54)	(1.39)		(2.64)	5.51					
Wasatch-US SCG	219	0.30	4.24	14.91		11.35	14.20					01/01/2020
RUSSELL 2000 GROWTH DAILY			5.87	13.71		9.50	6.15					01/01/2020
Excess			(1.63)	1.19		1.85	8.05					
William Blair-US SCG	207	0.28	6.92	16.91		12.66						03/01/2020
RUSSELL 2000 GROWTH DAILY			5.87	13.71		9.50						03/01/2020
Excess			1.05	3.20		3.15						
T Rowe Price-US SCV	94	0.13	2.95	10.35		7.30						03/01/2020
RUSSELL 2000 VALUE DAILY			5.39	10.68		7.56						03/01/2020
Excess			(2.43)	(0.33)		(0.26)						
Pzena-US SCV	83	0.11	5.75	10.90		7.10	(23.59)					01/01/2020
RUSSELL 2000 VALUE DAILY			5.39	10.68		7.56	(17.71)					01/01/2020
Excess			0.36	0.23		(0.46)	(5.87)					

New York City Employees' Retirement System

Manager / Benchmark Comparison Report

Rates of Return - Net Mgr



Periods Ending August 31, 2020

	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/20	FYE 6/30/2019	CYE 12/31/2019	CYE 12/31/2018	Inception Date
PanAgora-US SCC	137	0.19	4.64	11.06		7.69						02/01/2020
RUSSELL 2000 (DAILY)			5.63	12.40		8.56						02/01/2020
Excess			(0.99)	(1.34)		(0.87)						
Wellington US SCC	285	0.39	4.81	14.45	7.98	9.72	(3.26)	(4.20)	4.29	32.98	(10.09)	01/01/2013
RUSSELL 2000 (DAILY)			5.63	12.40	6.02	8.56	(5.53)	(6.63)	(3.31)	25.52	(11.01)	01/01/2013
Excess			(0.83)	2.06	1.96	1.17	2.27	2.43	7.60	7.46	0.93	
BlackRock US LMC R1000 Core	17,920	24.32	7.33	16.11	22.57	13.60	10.56	7.60	10.24	31.44		04/01/2018
RUSSELL 1000 (DAILY)			7.34	16.14	22.50	13.63	10.43	7.48	10.02	31.43		04/01/2018
Excess			(0.01)	(0.03)	0.07	(0.02)	0.13	0.12	0.22	0.02		
Legal General US LMCE	1,718	2.33	3.07	8.83	4.96	8.36	(3.32)	(3.32)				07/01/2019
RUSSELL 1000 (DAILY)			7.34	16.14	22.50	13.63	10.43	7.48				07/01/2019
Excess			(4.27)	(7.31)	(17.54)	(5.26)	(13.75)	(10.80)				
PIMCO RAFI US LMCE	1,968	2.67	5.43	10.49	3.76	9.26	(8.01)	(7.52)	5.02	25.33	(6.90)	07/01/2008
RUSSELL 1000 (DAILY)			7.34	16.14	22.50	13.63	10.43	7.48	10.02	31.43	(4.78)	07/01/2008
Excess			(1.91)	(5.65)	(18.74)	(4.36)	(18.44)	(15.00)	(5.00)	(6.09)	(2.11)	
FUND OF FUNDS												
Essex US SCG - Legato	20	0.03	5.61	19.27	8.12	13.00	(1.59)	(7.10)	0.22	26.79	(5.16)	05/01/2017
RUSSELL 2000 GROWTH DAILY			5.87	13.71	17.28	9.50	6.15	3.48	(0.49)	28.48	(9.31)	05/01/2017
Excess			(0.26)	5.56	(9.16)	3.50	(7.74)	(10.58)	0.71	(1.69)	4.15	
Dean US SCV - Legato	18	0.02	5.31	10.70	(8.45)	7.62	(19.35)	(19.29)	(2.96)	21.87	(12.50)	05/01/2017
RUSSELL 2000 VALUE DAILY			5.39	10.68	(6.14)	7.56	(17.71)	(17.48)	(6.24)	22.39	(12.86)	05/01/2017
Excess			(0.08)	0.02	(2.31)	0.06	(1.64)	(1.82)	3.27	(0.52)	0.36	
Bridge City US SCG - Legato	24	0.03	2.49	10.22	6.51	6.80	(2.11)	(1.94)	5.08	24.50	0.88	05/01/2017
RUSSELL 2000 GROWTH DAILY			5.87	13.71	17.28	9.50	6.15	3.48	(0.49)	28.48	(9.31)	05/01/2017
Excess			(3.38)	(3.50)	(10.77)	(2.70)	(8.26)	(5.42)	5.57	(3.98)	10.19	
Bowling US SCV - Legato	16	0.02	4.35	9.53	(11.97)	6.75	(19.43)	(21.79)	(10.41)	19.25	(19.60)	05/01/2017
RUSSELL 2000 VALUE DAILY			5.39	10.68	(6.14)	7.56	(17.71)	(17.48)	(6.24)	22.39	(12.86)	05/01/2017
Excess			(1.04)	(1.15)	(5.83)	(0.81)	(1.72)	(4.32)	(4.18)	(3.14)	(6.74)	
Altravue US SCV - Legato	17	0.02	7.70	14.37	5.91	13.98	(2.69)	(9.27)	(0.20)	20.04	(10.04)	05/01/2017
RUSSELL 2000 VALUE DAILY			5.39	10.68	(6.14)	7.56	(17.71)	(17.48)	(6.24)	22.39	(12.86)	05/01/2017
Excess			2.32	3.70	12.05	6.42	15.03	8.21	6.03	(2.36)	2.82	
Lisanti US SCG - Legato	24	0.03	4.82	19.51	21.32	11.78	19.07	7.88	8.77	27.53		03/01/2018
RUSSELL 2000 GROWTH DAILY			5.87	13.71	17.28	9.50	6.15	3.48	(0.49)	28.48		03/01/2018
Excess			(1.05)	5.80	4.04	2.28	12.92	4.40	9.26	(0.95)		
Legato Transition US												
NYCERS-TOTAL WORLD ex-USA	9,491	12.88	5.58	14.39	14.99	9.59	1.86	0.49	0.57	25.28	(14.11)	04/01/2004
WORLD ex-USA CUSTOM BM			5.46	11.90	6.65	8.44	(4.23)	(5.11)	0.16	22.91	(14.68)	04/01/2004
Excess			0.12	2.49	8.34	1.15	6.09	5.59	0.41	2.38	0.57	

New York City Employees' Retirement System

Manager / Benchmark Comparison Report

Rates of Return - Net Mgr



Periods Ending August 31, 2020

	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/20	FYE 6/30/2019	CYE 12/31/2019	CYE 12/31/2018	Inception Date
Causeway WorldxUS LMCC	1,164	1.58	6.27	11.88	1.78	6.98	(12.94)	(10.72)	(2.72)	23.48	(18.52)	05/01/2013
NYC Developed Value Benchmark			5.16	11.66	5.96	7.96	(4.44)	(5.42)	1.29	22.49	(14.09)	05/01/2013
Excess			1.11	0.22	(4.17)	(0.98)	(8.50)	(5.30)	(4.01)	0.99	(4.43)	
Sprucegrove WorldxUS LMCC	1,400	1.90	5.67	12.83	(2.35)	8.21	(13.67)	(17.01)	1.45	17.97	(13.93)	09/01/2007
NYC Developed Value Benchmark			5.16	11.66	5.96	7.96	(4.44)	(5.42)	1.29	22.49	(14.09)	09/01/2007
Excess			0.51	1.17	(8.31)	0.25	(9.23)	(11.59)	0.16	(4.52)	0.16	
Baillie Gifford WorldxUS LMCC	2,023	2.75	6.06	22.80	52.14	13.44	35.16	30.67	(0.32)	36.40	(12.79)	01/01/2008
NYC Developed Growth Benchmark			5.16	11.66	5.96	7.96	(4.44)	(5.42)	1.29	22.49	(14.09)	01/01/2008
Excess			0.90	11.14	46.19	5.48	39.60	36.09	(1.61)	13.91	1.30	
Walter Scott WorldxUS LMCC	1,639	2.22	4.13	11.94	21.43	8.81	8.84	9.00	9.71	28.56	(7.16)	05/01/2013
NYC Developed Growth Benchmark			5.16	11.66	5.96	7.96	(4.44)	(5.42)	1.29	22.49	(14.09)	05/01/2013
Excess			(1.03)	0.28	15.47	0.85	13.29	14.43	8.42	6.07	6.93	
Acadian WorldxUS SCC	457	0.62	5.30	13.56	12.94	10.58	(1.12)	(1.72)	(5.92)	24.57	(19.03)	05/01/2013
S&P EPAC Small Cap USD NET			6.97	14.47	12.09	12.04	(2.16)	(4.00)	(6.38)	23.71	(18.58)	05/01/2013
Excess			(1.66)	(0.91)	0.85	(1.46)	1.04	2.28	0.46	0.86	(0.45)	
Alger EAFE SCC	125	0.17	8.05	13.44	12.37	12.40	(2.29)	(4.68)				02/01/2019
MSCI EAFE SMALL CAP NET (DAILY)			7.46	12.59	10.66	11.07	(3.49)	(3.52)				02/01/2019
Excess			0.59	0.85	1.71	1.32	1.20	(1.16)				
Fidelity WorldxUS SCC	2	0.00							(7.15)		(18.48)	05/01/2013
S&P EPAC Small Cap USD NET			6.97					(4.00)	(6.38)	23.71	(18.58)	05/01/2013
Excess									(0.77)		0.10	
SSGA WorldxUS LMC NYC Custom IDX	1,989	2.70	5.15	11.79	6.43	7.99	(4.00)	(5.01)	1.49	22.55	(13.65)	02/01/2011
NYC Custom World ex US Index			5.16	11.66	5.96	7.96	(4.44)	(5.42)	1.29	22.49	(14.09)	02/01/2011
Excess			(0.01)	0.13	0.47	0.03	0.44	0.41	0.20	0.06	0.44	
SSGA WorldxUS SC Custom IDX	693	0.94	7.32	13.50	11.33	11.42	(2.51)	(2.75)	(6.00)	25.44	(17.72)	02/01/2014
World ex USA SC PASSIVE CUSTOM BM			7.29	13.39	10.89	11.41	(2.93)	(3.20)	(6.17)	25.41	(18.07)	02/01/2014
Excess			0.02	0.11	0.44	0.01	0.42	0.45	0.17	0.03	0.35	
NYCERS-TOTAL INTL FOF	504	0.68	4.25	13.51	10.75	9.38	(1.24)	(2.25)	(0.81)	25.04	(16.27)	05/01/2017
NYC Blended Custom Benchmark for FoF (ERS)			4.57	12.63	6.27	8.54	(4.87)	(5.98)	0.77	21.73	(14.39)	05/01/2017
Excess			(0.32)	0.89	4.49	0.84	3.63	3.74	(1.58)	3.30	(1.88)	
ARGA-WorldxUS LCV - Bivium	36	0.05	5.96	14.16	7.10	8.60	(12.07)	(4.71)	(4.22)	33.00	(19.39)	05/01/2017
MSCI AC WORLD ex US (NET)			4.28	13.85	8.31	8.93	(3.05)	(4.80)	1.29	21.51	(14.20)	05/01/2017
Excess			1.68	0.31	(1.22)	(0.33)	(9.02)	0.09	(5.51)	11.49	(5.20)	
Baillard-WorldxUS LCC - Bivium	31	0.04	4.11	14.13	5.95	8.96	(4.05)	(6.77)	(2.62)	21.78	(20.86)	05/01/2017
MSCI AC WORLD ex US (NET)			4.28	13.85	8.31	8.93	(3.05)	(4.80)	1.29	21.51	(14.20)	05/01/2017
Excess			(0.17)	0.28	(2.36)	0.03	(0.99)	(1.96)	(3.91)	0.27	(6.67)	
Blackcrane-WorldxUS SCG - Bivium	9	0.01	4.75	11.82	21.21	7.78	4.44	8.69	(7.06)	33.12	(24.01)	05/01/2017
MSCI ACWI Ex US Small Cap (DAILY)			6.58	15.55	10.96	11.91	(2.41)	(4.34)	(5.94)	22.42	(18.20)	05/01/2017
Excess			(1.83)	(3.73)	10.24	(4.13)	6.85	13.03	(1.12)	10.71	(5.81)	

New York City Employees' Retirement System

Manager / Benchmark Comparison Report

Rates of Return - Net Mgr



Periods Ending August 31, 2020

	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/20	FYE 6/30/2019	CYE 12/31/2019	CYE 12/31/2018	Inception Date
Dundas-WorldxUS LCG - Bivium	42	0.06	3.46	13.56	21.61	10.13	7.43	6.98	2.97	28.48	(11.85)	05/01/2017
MSCI AC WORLD ex US (NET)			4.28	13.85	8.31	8.93	(3.05)	(4.80)	1.29	21.51	(14.20)	05/01/2017
Excess			(0.82)	(0.29)	13.29	1.20	10.48	11.78	1.68	6.97	2.35	
Global Alpha-WorldxUS SCC - Bivium	8	0.01	5.47	11.95	7.71	10.39	(7.65)	(6.99)	0.45	28.58	(12.85)	05/01/2017
MSCI ACWI Ex US Small Cap (DAILY)			6.58	15.55	10.96	11.91	(2.41)	(4.34)	(5.94)	22.42	(18.20)	05/01/2017
Excess			(1.10)	(3.61)	(3.26)	(1.52)	(5.23)	(2.64)	6.40	6.17	5.34	
Radin-WorldxUS SCV - Bivium	6	0.01	9.22	17.55	0.26	13.27	(14.85)	(20.93)	(11.10)	13.65	(19.84)	05/01/2017
MSCI ACWI Ex US Small Cap (DAILY)			6.58	15.55	10.96	11.91	(2.41)	(4.34)	(5.94)	22.42	(18.20)	05/01/2017
Excess			2.64	2.00	(10.71)	1.37	(12.44)	(16.58)	(5.15)	(8.77)	(1.64)	
Smith Asset Mgmt-WorldxUS LCC - Bivium	28	0.04	2.62	10.39	(1.28)	6.32	(10.69)	(11.83)		19.63		12/01/2018
MSCI AC WORLD ex US (NET)			4.28	13.85	8.31	8.93	(3.05)	(4.80)		21.51		12/01/2018
Excess			(1.66)	(3.46)	(9.59)	(2.61)	(7.64)	(7.03)		(1.88)		
Martin-EAFE ACG - FIS	20	0.03	2.98	10.16	8.98	7.77	3.34	0.58				02/01/2019
MSCI EAFE			5.14	11.26	6.13	7.59	(4.61)	(5.13)				02/01/2019
Excess			(2.17)	(1.10)	2.85	0.18	7.95	5.71				
Redwood-EAFE ACG - FIS	28	0.04	5.31									08/01/2020
Custom NYCERS All Country Blend			5.61									08/01/2020
Excess			(0.30)									
Osmosis-EAFE ACV - FIS	23	0.03	5.59	11.88	7.71	8.05	(2.85)	(4.74)	(6.63)	17.87	(15.73)	05/01/2017
MSCI EAFE			5.14	11.26	6.13	7.59	(4.61)	(5.13)	1.08	22.01	(13.79)	05/01/2017
Excess			0.45	0.63	1.57	0.46	1.77	0.40	(7.71)	(4.15)	(1.94)	
Metis-EAFE ACV - FIS	0	0.00						(9.09)	(9.87)	19.38	(18.33)	05/01/2017
MSCI EAFE			5.14					(5.13)	1.08	22.01	(13.79)	05/01/2017
Excess								(3.95)	(10.95)	(2.63)	(4.54)	
Dundas-EAFE ACG - FIS	27	0.04	3.61	13.43	21.63	10.00	7.23	7.06	5.22	30.17	(9.93)	05/01/2017
MSCI EAFE + Canada Net Index			5.16	11.66	5.96	7.96	(4.44)	(5.42)	1.29	22.49	(14.09)	05/01/2017
Excess			(1.55)	1.77	15.68	2.04	11.68	12.48	3.93	7.67	4.16	
Foresight-EAFE LMCV - FIS	27	0.04	2.76									08/01/2020
MSCI EAFE + Canada Net Index			5.16									08/01/2020
Excess			(2.40)									
Denali-EAFE ACV - FIS	0	0.00						(20.48)	(0.58)	11.69	(11.86)	05/01/2017
MSCI EAFE + Canada Net Index			5.16					(5.42)	1.29	22.49	(14.09)	05/01/2017
Excess								(15.06)	(1.86)	(10.80)	2.23	
Change Global-EM ACV - FIS	18	0.02	2.13	17.74	(3.59)	11.12	(12.70)	(17.54)	0.40	14.96	(16.94)	05/01/2017
NYC Blended Custom Benchmark for FoF (ERS)			4.57	12.63	6.27	8.54	(4.87)	(5.98)	0.77	21.73	(14.39)	05/01/2017
Excess			(2.44)	5.11	(9.86)	2.58	(7.83)	(11.55)	(0.37)	(6.78)	(2.56)	
ARGA-WorldxUS LMCV - FIS	20	0.03	5.49									08/01/2020
Custom NYCERS All Country Blend			5.61									08/01/2020
Excess			(0.12)									

New York City Employees' Retirement System

Manager / Benchmark Comparison Report

Rates of Return - Net Mgr



Periods Ending August 31, 2020

	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/20	FYE 6/30/2019	CYE 12/31/2019	CYE 12/31/2018	Inception Date
Ativo-EAFE ACG - FIS	0	0.00						(7.94)	1.53	22.72	(12.64)	05/01/2017
MSCI EAFE + Canada Net Index			5.16					(5.42)	1.29	22.49	(14.09)	05/01/2017
Excess								(2.51)	0.24	0.23	1.45	
Redwood-WorldxUS LMCC - Leading Edge	39	0.05	5.37	18.58	21.80	13.95	8.93	3.38	2.45	30.08	(14.32)	05/01/2017
MSCI ACWI ex USA IMI Net			4.58	14.07	8.66	9.31	(2.97)	(4.74)	0.26	21.63	(14.76)	05/01/2017
Excess			0.80	4.51	13.14	4.64	11.90	8.11	2.19	8.45	0.43	
Henry James-WorldxUS LMCC - Leading Edge	42	0.06	4.32	14.36	15.27	9.57	4.58	2.08	3.22	28.21	(14.92)	05/01/2017
MSCI ACWI ex USA IMI Net			4.58	14.07	8.66	9.31	(2.97)	(4.74)	0.26	21.63	(14.76)	05/01/2017
Excess			(0.26)	0.29	6.61	0.26	7.55	6.82	2.95	6.58	(0.17)	
Haven-WorldxUS LMCV - Leading Edge	22	0.03	3.29	12.34	8.98	7.81	(3.18)	(3.76)	(1.77)	21.24		05/01/2018
MSCI ACWI ex USA IMI Net			4.58	14.07	8.66	9.31	(2.97)	(4.74)	0.26	21.63		05/01/2018
Excess			(1.28)	(1.73)	0.32	(1.50)	(0.20)	0.98	(2.04)	(0.39)		
Blackcrane-WorldxUS ACC - Leading Edge	24	0.03	4.49	9.25	15.07	6.77	0.24	5.40	(10.27)	27.63	(23.09)	05/01/2017
MSCI ACWI ex USA IMI Net			4.58	14.07	8.66	9.31	(2.97)	(4.74)	0.26	21.63	(14.76)	05/01/2017
Excess			(0.08)	(4.82)	6.41	(2.55)	3.22	10.13	(10.53)	6.00	(8.33)	
Applied Rsch-WorldxUS LCG - Leading Edge	27	0.04	3.98	17.79	21.65	11.27	11.57	8.76		32.21		01/01/2019
MSCI AC WORLD ex US (NET)			4.28	13.85	8.31	8.93	(3.05)	(4.80)		21.51		01/01/2019
Excess			(0.31)	3.93	13.34	2.34	14.62	13.57		10.69		
Ativo-WorldxUS ACC - Leading Edge	27	0.04	4.15	13.55	5.82	9.90	(4.85)	(6.25)	2.73	23.96	(12.34)	05/01/2017
MSCI ACWI ex USA IMI Net			4.58	14.07	8.66	9.31	(2.97)	(4.74)	0.26	21.63	(14.76)	05/01/2017
Excess			(0.43)	(0.52)	(2.84)	0.59	(1.88)	(1.51)	2.47	2.33	2.41	
NYCERS-TOTAL EMERGING MARKETS	3,565	4.84	0.49	18.67	4.58	10.20	(7.11)	(11.51)	4.06	14.78	(14.23)	09/01/2005
NYCERS Custom EM Index			(0.49)	16.41	3.33	8.76	(9.07)	(11.27)	4.05	15.10	(13.38)	09/01/2005
Excess			0.98	2.25	1.26	1.43	1.97	(0.24)	0.01	(0.33)	(0.85)	
Baillie Gifford EM	980	1.33	2.59	27.62	25.67	14.94	9.31	3.02	9.14	24.53	(14.40)	11/01/2005
NYCERS Custom EM Index			(0.49)	16.41	3.33	8.76	(9.07)	(11.27)	4.05	15.10	(13.38)	11/01/2005
Excess			3.08	11.21	22.34	6.18	18.38	14.29	5.09	9.43	(1.02)	
Acadian EM	662	0.90	(1.59)	15.52	(2.00)	8.64	(12.37)	(15.98)	1.12	12.83	(17.60)	11/01/2005
NYCERS Custom EM Index			(0.49)	16.41	3.33	8.76	(9.07)	(11.27)	4.05	15.10	(13.38)	11/01/2005
Excess			(1.09)	(0.89)	(5.33)	(0.13)	(3.30)	(4.71)	(2.93)	(2.28)	(4.22)	
Parametric EM	1	0.00						(19.26)	2.18	10.92	(14.77)	06/01/2012
NYCERS Custom EM Index			(0.49)					(11.27)	4.05	15.10	(13.38)	06/01/2012
Excess								(7.99)	(1.87)	(4.18)	(1.38)	
DFA EM	671	0.91	2.10	16.41	(3.81)	9.00	(13.93)	(19.99)	3.24	9.04	(13.70)	11/01/2005
NYCERS Custom EM Index			(0.49)	16.41	3.33	8.76	(9.07)	(11.27)	4.05	15.10	(13.38)	11/01/2005
Excess			2.59	0.00	(7.13)	0.23	(4.86)	(8.72)	(0.81)	(6.06)	(0.31)	
BlackRock MSCI EM Core	1,250	1.70	(0.62)	16.32	3.13	8.61	(8.97)	(11.16)	4.05	15.10	(12.86)	04/01/2011
MSCI CUSTOM NYCERS EMERGING MARKETS (NET)			(0.49)	16.41	3.33	8.76	(9.07)	(11.27)	4.05	15.10	(12.97)	04/01/2011
Excess			(0.13)	(0.09)	(0.20)	(0.15)	0.10	0.11	0.00	0.00	0.11	

New York City Employees' Retirement System

Manager / Benchmark Comparison Report

Rates of Return - Net Mgr



Periods Ending August 31, 2020

	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/20	FYE 6/30/2019	CYE 12/31/2019	CYE 12/31/2018	Inception Date
NYCERS-TOTAL GLOBAL EQUITY												
MSCI World Index	331	0.45	4.33	12.67	18.92	11.96	7.74	5.24		34.10		08/01/2018
Excess			(2.35)	(2.07)	2.13	0.17	2.40	2.39		6.43		08/01/2018
Fiera-Global												
MSCI World Index	331	0.45	4.33	12.67	18.92	11.96	7.74	5.24		34.10		08/01/2018
Excess			(2.35)	(2.07)	2.13	0.17	2.40	2.39		6.43		08/01/2018
NYCERS-TOTAL HEDGE FUNDS												
HFRI Fund of Funds Composite Index + 1%	4	0.00	(0.05)	1.65	(21.16)	1.70	(20.32)	(17.51)	3.59	9.08	5.87	07/01/2011
Excess			(2.21)	(5.16)	(27.72)	(2.90)	(23.81)	(19.03)	1.43	(0.38)	8.92	07/01/2011
Luxor Capital												
HFRI Fund of Funds Composite Index + 1%	1	0.00	(0.14)	(0.42)	(27.19)	(0.28)	(21.70)	(27.01)	(16.92)	(22.83)	(0.42)	06/01/2014
Excess			(2.30)	(7.23)	(33.75)	(4.88)	(25.19)	(28.53)	(19.08)	(32.29)	2.64	06/01/2014
Perry Capital Lp												
HFRI Fund of Funds Composite Index + 1%	2	0.00	0.00	2.77	(15.53)	2.77	(16.70)	(10.55)	(1.97)	21.10	(11.07)	06/01/2013
Excess			(2.16)	(4.04)	(22.08)	(1.83)	(20.18)	(12.06)	(4.13)	11.64	(8.01)	06/01/2013
FIXED INCOME SUMMARY												
NYCERS-TOTAL STRUCTURED												
NYC Custom Structured Index-ERS	13,623	18.49	(0.82)	1.36	8.70	0.72	10.49	12.34	8.45	9.28	(0.37)	01/01/1985
Excess			(0.02)	0.16	(0.82)	0.11	(1.31)	(1.66)	(1.06)	(0.96)	(0.19)	01/01/1985
Neuberger Berman Mortgages												
FTSE MORTGAGE INDEX	0	0.00	0.02					5.39	6.16	6.34	0.82	02/01/2010
Excess								(0.57)	(0.23)	(0.34)	(0.19)	02/01/2010
Wellington Mortgages												
BBG BARC Mtg Idx	574	0.78	0.04									08/01/2020
Excess												08/01/2020
BlackRock Mortgages												
FTSE MORTGAGE INDEX	3,077	4.18	0.17	0.47	5.13	0.44	4.39	6.25	6.66	7.00	0.96	09/01/2000
Excess			0.15	0.35	0.43	0.29	0.62	0.28	0.27	0.33	(0.05)	09/01/2000
Prudential Credit												
NYC - Investment Grade Credit	873	1.18	(1.04)	4.23	7.47	2.13	6.98	9.07	10.10	13.56	(1.91)	10/01/2000
Excess			(1.36)	3.64	7.09	1.74	6.84	9.26	10.13	13.40	(1.90)	10/01/2000
			0.32	0.58	0.38	0.40	0.14	(0.20)	(0.03)	0.17	(0.01)	
T Rowe Price Credit												
NYC - Investment Grade Credit	2,587	3.51	(1.16)	4.45	7.23	1.96	6.44	9.18	10.50	14.52	(2.41)	01/01/1987
Excess			(1.36)	3.64	7.09	1.74	6.84	9.26	10.13	13.40	(1.90)	01/01/1987
			0.20	0.81	0.14	0.22	(0.40)	(0.08)	0.37	1.13	(0.51)	
BlackRock Credit												
NYC - Investment Grade Credit	733	0.99	(1.10)	3.74	7.72	1.92	7.18	9.49	10.29	13.98	(2.00)	10/01/2000
Excess			(1.36)	3.64	7.09	1.74	6.84	9.26	10.13	13.40	(1.90)	10/01/2000
			0.26	0.10	0.63	0.18	0.34	0.22	0.16	0.59	(0.10)	

New York City Employees' Retirement System

Manager / Benchmark Comparison Report

Rates of Return - Net Mgr



Periods Ending August 31, 2020

	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/20	FYE 6/30/2019	CYE 12/31/2019	CYE 12/31/2018	Inception Date
Taplin Credit	234	0.32	(1.36)	4.86	8.31	2.32	7.26	9.65	10.07	15.75	(3.47)	07/01/1991
NYC - Investment Grade Credit			(1.36)	3.64	7.09	1.74	6.84	9.26	10.13	13.40	(1.90)	07/01/1991
Excess			0.00	1.22	1.22	0.58	0.42	0.39	(0.06)	2.35	(1.56)	
Barrow Hanley Credit	445	0.60	(1.06)	4.58	9.33	2.17	8.39	10.72	10.93	14.78	(2.37)	09/01/2009
NYC - Investment Grade Credit			(1.36)	3.64	7.09	1.74	6.84	9.26	10.13	13.40	(1.90)	09/01/2009
Excess			0.30	0.94	2.23	0.43	1.55	1.45	0.80	1.38	(0.46)	
BlackRock LI Treasury	1,099	1.49	(2.24)	0.28	9.74	0.04	13.98	16.45	10.20	10.41	(0.19)	08/01/2009
NYC - Treasury Agency Plus Five			(2.32)	0.10	10.19	(0.04)	14.58	17.08	10.38	10.40	(0.05)	08/01/2009
Excess			0.07	0.18	(0.44)	0.08	(0.60)	(0.63)	(0.19)	0.01	(0.14)	
SSGA LI Treasury	1,449	1.97	(2.15)	0.26	10.12	0.05	14.48	17.11	10.17	10.53	(0.18)	06/01/1987
NYC - Treasury Agency Plus Five			(2.32)	0.10	10.19	(0.04)	14.58	17.08	10.38	10.40	(0.05)	06/01/1987
Excess			0.17	0.16	(0.07)	0.09	(0.10)	0.03	(0.22)	0.13	(0.13)	
SSgA Int Gov Bond Index *	1,432	1.94	(0.14)	(0.94)	4.23	(1.02)	4.68	7.03	5.02	5.09	2.05	03/01/2017
FTSE USBIG Treasury/Agency 1-10 y			(0.19)	0.21	5.42	0.12	5.87	6.99	6.11	5.18	1.42	03/01/2017
Excess			0.05	(1.15)	(1.19)	(1.14)	(1.19)	0.03	(1.09)	(0.09)	0.63	
* Assets were in transition as of 9/29/17												
SSGA ST Treasury 1-3Y	1,119	1.52	(0.02)	0.10	3.43	0.08	3.01	4.06	3.94	3.54	1.52	01/01/2017
FTSE USBIG Treasury 1-3 Y Index			(0.01)	0.11	3.43	0.08	3.02	4.06	3.95	3.56	1.56	01/01/2017
Excess			(0.01)	(0.01)	0.00	0.00	(0.01)	(0.01)	(0.01)	(0.02)	(0.04)	
NYCERS-TOTAL CORE FI- EMERGING MGRS	0	0.00							7.92	8.95	(0.03)	01/01/1992
BBG BARC Agg (Dly)			(0.81)					8.74	7.87	8.72	0.01	01/01/1992
Excess									0.05	0.23	(0.04)	
Integrity-Core - Progress	0	0.00							7.68	8.56	0.01	07/01/2016
BBG BARC Agg (Dly)			(0.81)					8.74	7.87	8.72	0.01	07/01/2016
Excess									(0.19)	(0.16)	0.00	
Optimum Quantvest-Core - Progress	0	0.00							8.09	7.88	0.22	07/01/2016
BBG BARC Agg (Dly)			(0.81)					8.74	7.87	8.72	0.01	07/01/2016
Excess									0.22	(0.84)	0.21	
New Century-Core Plus - Progress	0	0.00							7.84	8.59	0.17	01/01/2008
BBG BARC Agg (Dly)			(0.81)					8.74	7.87	8.72	0.01	01/01/2008
Excess									(0.03)	(0.13)	0.16	
Pugh-Core Plus - Progress	0	0.00							7.70	8.92	(0.39)	01/01/2008
BBG BARC Agg (Dly)			(0.81)					8.74	7.87	8.72	0.01	01/01/2008
Excess									(0.17)	0.21	(0.40)	
Ramirez-Core - Progress	0	0.00							8.18	9.63	0.04	08/01/2014
BBG BARC Agg (Dly)			(0.81)					8.74	7.87	8.72	0.01	08/01/2014
Excess									0.31	0.91	0.03	
NYCERS-TOTAL HIGH YIELD	3,127	4.24	0.94	6.21	4.65	5.67	1.72	0.27	7.29	14.38	(2.69)	10/01/1994
High Yield Custom Benchmark			0.96	6.67	4.65	5.66	1.61	0.00	7.48	14.32	(2.34)	10/01/1994
Excess			(0.03)	(0.46)	0.00	0.00	0.11	0.27	(0.19)	0.06	(0.35)	

New York City Employees' Retirement System

Manager / Benchmark Comparison Report

Rates of Return - Net Mgr



Periods Ending August 31, 2020

	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/20	FYE 6/30/2019	CYE 12/31/2019	CYE 12/31/2018	Inception Date
Oaktree High Yield	430	0.58	0.92	6.30	4.97	5.66	2.18	0.57	6.68	13.98	(3.46)	02/01/2013
BBG BARC US HY - 2% Issr Cap			0.96	6.67	4.65	5.66	1.61	0.00	7.48	14.32	(2.08)	02/01/2013
Excess			(0.04)	(0.38)	0.32	0.00	0.56	0.57	(0.80)	(0.34)	(1.38)	
Pinebridge High Yield	260	0.35	1.21			5.75						07/01/2020
ICE BofA US High Yield Index			0.98			5.81						07/01/2020
Excess			0.22			(0.06)						
Neuberger Berman High Yield	461	0.63	0.80	6.21	4.40	5.91	1.26	(0.26)	7.31	14.15	(2.00)	09/01/2012
BBG BARC US HY - 2% Issr Cap			0.96	6.67	4.65	5.66	1.61	0.00	7.48	14.32	(2.08)	09/01/2012
Excess			(0.16)	(0.46)	(0.25)	0.25	(0.35)	(0.26)	(0.17)	(0.17)	0.08	
Stone Harbor High Yield	5	0.01							8.31	14.12	(2.62)	10/01/2012
BBG BARC US HY - 2% Issr Cap			0.96					0.00	7.48	14.32	(2.08)	10/01/2012
Excess									0.83	(0.20)	(0.53)	
T Rowe Price High Yield	696	0.94	0.87	6.07	4.77	5.65	1.80	0.88	8.81	15.63	(2.36)	01/01/1995
BBG BARC US HY - 2% Issr Cap			0.96	6.67	4.65	5.66	1.61	0.00	7.48	14.32	(2.08)	01/01/1995
Excess			(0.10)	(0.60)	0.12	(0.02)	0.18	0.88	1.33	1.32	(0.28)	
Shenkman High Yield	397	0.54	0.46	5.71	4.63	5.03	1.58	0.86	6.23	14.32	(3.21)	10/01/2003
BBG BARC US HY - 2% Issr Cap			0.96	6.67	4.65	5.66	1.61	0.00	7.48	14.32	(2.08)	10/01/2003
Excess			(0.51)	(0.96)	(0.02)	(0.63)	(0.03)	0.86	(1.25)	0.01	(1.12)	
Nomura High Yield	323	0.44	1.73	7.83	4.04	6.52	1.36	(1.40)		13.37		12/01/2018
BBG BARC US HY - 2% Issr Cap			0.96	6.67	4.65	5.66	1.61	0.00		14.32		12/01/2018
Excess			0.77	1.16	(0.62)	0.86	(0.25)	(1.40)		(0.95)		
Eaton Vance High Yield	313	0.42	0.79	5.95	3.86	5.53	0.94	(0.28)		14.56		12/01/2018
BBG BARC US HY - 2% Issr Cap			0.96	6.67	4.65	5.66	1.61	0.00		14.32		12/01/2018
Excess			(0.17)	(0.73)	(0.79)	(0.13)	(0.67)	(0.28)		0.24		
Mackay Shields High Yield	243	0.33	1.10	6.54	6.80	5.49	3.58	2.30		14.19		12/01/2018
BBG BARC US HY - 2% Issr Cap			0.96	6.67	4.65	5.66	1.61	0.00		14.32		12/01/2018
Excess			0.13	(0.13)	2.15	(0.17)	1.97	2.30		(0.13)		
Transition High Yield	0	0.00										09/01/1994
NYCERS-TOTAL BANK LOANS	932	1.27	1.30	3.68	0.42	2.90	(1.78)	(1.77)	3.53	8.00	0.66	12/01/2012
CSFB LEVERAGED LOAN INDEX			1.50	4.81	0.57	3.41	(1.51)	(2.27)	4.15	8.17	1.14	12/01/2012
Excess			(0.20)	(1.13)	(0.15)	(0.51)	(0.28)	0.50	(0.61)	(0.17)	(0.48)	
Bain Bank Loans	51	0.07	1.48	2.70	(0.37)	1.97	(2.52)	(1.62)				07/01/2019
CSFB LEVERAGED LOAN INDEX			1.50	4.81	0.57	3.41	(1.51)	(2.27)				07/01/2019
Excess			(0.02)	(2.11)	(0.93)	(1.44)	(1.01)	0.65				
Barings Bank Loans	292	0.40	1.36	3.78	(0.58)	3.06	(2.95)	(3.08)	2.98	7.82	0.38	12/01/2012
CSFB LEVERAGED LOAN INDEX			1.50	4.81	0.57	3.41	(1.51)	(2.27)	4.15	8.17	1.14	12/01/2012
Excess			(0.15)	(1.03)	(1.15)	(0.35)	(1.44)	(0.81)	(1.17)	(0.36)	(0.76)	

New York City Employees' Retirement System

Manager / Benchmark Comparison Report

Rates of Return - Net Mgr



Periods Ending August 31, 2020

	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/20	FYE 6/30/2019	CYE 12/31/2019	CYE 12/31/2018	Inception Date
Credit Suisse Bank Loans	301	0.41	1.35	3.99	1.18	3.02	(1.10)	(0.96)	3.93	8.31	1.04	02/01/2013
CSFB LEVERAGED LOAN INDEX			1.50	4.81	0.57	3.41	(1.51)	(2.27)	4.15	8.17	1.14	02/01/2013
Excess			(0.15)	(0.82)	0.61	(0.39)	0.40	1.31	(0.22)	0.13	(0.10)	
Guggenheim Bank Loans	0	0.00									1.24	03/01/2013
CSFB LEVERAGED LOAN INDEX			1.50					(2.27)	4.15	8.17	1.14	03/01/2013
Excess											0.10	
Invesco Bank Loans	288	0.39	1.13	3.95	1.18	3.29	(0.80)	(1.41)	3.95	8.60	0.17	02/01/2013
CSFB LEVERAGED LOAN INDEX			1.50	4.81	0.57	3.41	(1.51)	(2.27)	4.15	8.17	1.14	02/01/2013
Excess			(0.37)	(0.85)	0.61	(0.12)	0.71	0.85	(0.19)	0.42	(0.97)	
NYCERS-TOTAL TIPS MANAGERS	2,818	3.83	0.96	4.40	8.74	3.25	9.43	8.24	4.82	8.44	(1.27)	06/01/2005
BBG BARC Gbl Int-Lk: US TIPS (Dly)			1.09	4.57	8.99	3.42	9.63	8.28	4.84	8.43	(1.26)	06/01/2005
Excess			(0.13)	(0.17)	(0.24)	(0.16)	(0.19)	(0.04)	(0.02)	0.01	(0.01)	
SSGA TIPS	1,994	2.71	0.94	4.37	8.65	3.23	9.35	8.18	4.82	8.44	(1.30)	08/01/2005
BBG BARC Gbl Int-Lk: US TIPS (Dly)			1.09	4.57	8.99	3.42	9.63	8.28	4.84	8.43	(1.26)	08/01/2005
Excess			(0.16)	(0.20)	(0.34)	(0.19)	(0.28)	(0.10)	(0.01)	0.02	(0.04)	
BlackRock TIPS	825	1.12	1.01	4.47	8.97	3.31	9.64	8.39	4.79	8.42	(1.18)	12/01/2005
BBG BARC Gbl Int-Lk: US TIPS (Dly)			1.09	4.57	8.99	3.42	9.63	8.28	4.84	8.43	(1.26)	12/01/2005
Excess			(0.08)	(0.10)	(0.01)	(0.10)	0.01	0.11	(0.04)	(0.01)	0.08	
NYCERS-TOTAL CONVERTIBLE BONDS	1,355	1.84	2.11	9.10	11.49	6.04	5.32	5.46	6.59	15.95	(0.69)	06/01/2008
ICE BofA All US Conv Ex Mandatory			9.49	23.87	37.71	17.43	28.75	17.79	8.00	22.89	0.65	06/01/2008
Excess			(7.38)	(14.77)	(26.22)	(11.39)	(23.44)	(12.33)	(1.42)	(6.94)	(1.34)	
Advent Convertible Bonds	872	1.18	2.56	8.63	10.85	6.18	6.51	4.39	5.38	12.71	(1.64)	06/01/2008
ICE BofA US Convertibles - Yield Alter			3.37	10.13	9.71	7.42	4.13	2.92	4.57	15.40	(0.42)	06/01/2008
Excess			(0.81)	(1.50)	1.13	(1.24)	2.38	1.47	0.80	(2.69)	(1.22)	
Victory Convertible Bonds	484	0.66	1.31	9.89	12.52	5.79	3.90	7.14	8.29	20.49	0.66	07/01/2008
ICE BofA All IG US Convertibles			1.91	6.82	5.10	6.89	(0.36)	1.15	10.51	20.88	3.35	07/01/2008
Excess			(0.60)	3.08	7.42	(1.10)	4.26	5.98	(2.22)	(0.39)	(2.69)	
NYCERS-TOTAL CORE FI- DEVELOPING MGRS	611	0.83	(0.32)	2.71	7.01	1.47	6.99	8.15	7.93	9.70	(1.05)	05/01/2009
BBG BARC Agg (Dly)			(0.81)	1.31	6.47	0.67	6.85	8.74	7.87	8.72	0.01	05/01/2009
Excess			0.48	1.40	0.54	0.79	0.14	(0.59)	0.06	0.98	(1.06)	
LM Capital-Core Plus	356	0.48	(0.23)	2.91	7.39	1.60	7.42	8.40	8.02	9.70	(1.14)	05/01/2009
BBG BARC Agg (Dly)			(0.81)	1.31	6.47	0.67	6.85	8.74	7.87	8.72	0.01	05/01/2009
Excess			0.58	1.60	0.92	0.93	0.57	(0.34)	0.15	0.99	(1.15)	
Pugh-CorePlus	53	0.07	(0.79)	1.91		0.99						06/01/2020
BBG BARC Agg (Dly)			(0.81)	1.31		0.67						06/01/2020
Excess			0.01	0.60		0.31						
GIA-Core Plus	203	0.28	(0.36)	2.59	6.35	1.35	6.19	7.58	7.67	9.69	(0.81)	07/01/2015
BBG BARC Agg (Dly)			(0.81)	1.31	6.47	0.67	6.85	8.74	7.87	8.72	0.01	07/01/2015
Excess			0.44	1.28	(0.12)	0.67	(0.66)	(1.16)	(0.20)	0.97	(0.82)	

New York City Employees' Retirement System

Manager / Benchmark Comparison Report

Rates of Return - Net Mgr



Periods Ending August 31, 2020

	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/20	FYE 6/30/2019	CYE 12/31/2019	CYE 12/31/2018	Inception Date
NYCERS-TOTAL OPPORTUNISTIC FIXED	2,381	3.23	2.58	4.86	0.39	4.07	(0.54)	(2.01)	5.08	5.32	6.32	10/01/2007
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72	6.82	4.93	5.06	1.05	0.88	9.26	14.66	2.36	10/01/2007
Excess			0.86	(1.97)	(4.54)	(0.99)	(1.59)	(2.89)	(4.18)	(9.35)	3.95	
Ave Special Situation Fd VI	5	0.01	0.81	0.81	(2.45)	0.81	(3.53)	(2.71)	(0.54)	(0.31)	12.41	08/01/2011
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72	6.82	4.93	5.06	1.05	0.88	9.26	14.66	2.36	08/01/2011
Excess			(0.91)	(6.02)	(7.38)	(4.25)	(4.58)	(3.59)	(9.80)	(14.97)	10.05	
Brightwood Capital Advisors III, LP	19	0.03	0.00	2.11	(4.79)	2.11	(3.94)	(8.74)	11.37	2.92	11.00	04/01/2015
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72	6.82	4.93	5.06	1.05	0.88	9.26	14.66	2.36	04/01/2015
Excess			(1.72)	(4.71)	(9.72)	(2.94)	(4.98)	(9.63)	2.11	(11.74)	8.64	
Brightwood Capital Advisors FD IV, LP	74	0.10	(0.72)	(0.72)	(7.89)	(0.72)	(8.23)	(7.97)	6.27	3.77	6.94	11/01/2016
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72	6.82	4.93	5.06	1.05	0.88	9.26	14.66	2.36	11/01/2016
Excess			(2.44)	(7.55)	(12.82)	(5.78)	(9.28)	(8.86)	(2.99)	(10.90)	4.58	
Fortress Ctr St Ptnrs	139	0.19	5.98	5.98	(1.78)	5.98	(4.46)	(5.36)	7.94	8.55	10.99	05/01/2012
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72	6.82	4.93	5.06	1.05	0.88	9.26	14.66	2.36	05/01/2012
Excess			4.26	(0.84)	(6.71)	0.93	(5.51)	(6.24)	(1.32)	(6.11)	8.63	
ICG Centre St Partner	78	0.11	4.26	8.08	13.42	8.08	10.34	7.73	11.64	11.66	9.02	07/01/2017
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72	6.82	4.93	5.06	1.05	0.88	9.26	14.66	2.36	07/01/2017
Excess			2.54	1.26	8.49	3.03	9.30	6.85	2.38	(3.00)	6.66	
Lone Star Fd VIII	23	0.03	4.12	4.12	(20.77)	4.12	(19.40)	(23.87)	(0.88)	(4.95)	3.61	11/01/2013
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72	6.82	4.93	5.06	1.05	0.88	9.26	14.66	2.36	11/01/2013
Excess			2.40	(2.70)	(25.70)	(0.94)	(20.44)	(24.75)	(10.14)	(19.61)	1.25	
Oaktree Opp Fd IX	63	0.09	0.00	10.50	(11.57)	10.50	(10.28)	(16.38)	8.60	7.21	4.57	04/01/2013
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72	6.82	4.93	5.06	1.05	0.88	9.26	14.66	2.36	04/01/2013
Excess			(1.72)	3.68	(16.50)	5.45	(11.33)	(17.27)	(0.66)	(7.45)	2.21	
Torchlight Debt Opp V	18	0.02	2.67	2.81	1.15	2.67	(0.59)	1.19	7.72	6.54	14.55	08/01/2015
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72	6.82	4.93	5.06	1.05	0.88	9.26	14.66	2.36	08/01/2015
Excess			0.95	(4.02)	(3.78)	(2.39)	(1.64)	0.31	(1.54)	(8.12)	12.19	
TORCHLIGHT DEBT OPP VI	83	0.11	0.00	0.00	2.12	0.00	(0.11)	2.21				06/01/2019
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72	6.82	4.93	5.06	1.05	0.88				06/01/2019
Excess			(1.72)	(6.82)	(2.80)	(5.06)	(1.16)	1.33				
Angelo Gordon Ct St Ptnrs	183	0.25	0.66	3.62	(3.25)	0.64	(4.74)	(1.47)	(0.74)	0.10	7.97	07/01/2012
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72	6.82	4.93	5.06	1.05	0.88	9.26	14.66	2.36	07/01/2012
Excess			(1.06)	(3.20)	(8.18)	(4.42)	(5.79)	(2.35)	(10.00)	(14.57)	5.61	
Apollo Centre Street Partnership, L.P	267	0.36	1.67	5.36	8.81	3.65	5.82	6.85	5.49	6.70	8.34	05/01/2012
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72	6.82	4.93	5.06	1.05	0.88	9.26	14.66	2.36	05/01/2012
Excess			(0.05)	(1.46)	3.88	(1.41)	4.78	5.97	(3.77)	(7.96)	5.98	
Ares Centre Street	202	0.27	1.19	3.14	3.27	2.15	0.81	2.48	9.06	8.59	9.71	01/01/2015
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72	6.82	4.93	5.06	1.05	0.88	9.26	14.66	2.36	01/01/2015
Excess			(0.53)	(3.68)	(1.66)	(2.90)	(0.23)	1.60	(0.20)	(6.07)	7.35	

New York City Employees' Retirement System

Manager / Benchmark Comparison Report

Rates of Return - Net Mgr



Periods Ending August 31, 2020

	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/20	FYE 6/30/2019	CYE 12/31/2019	CYE 12/31/2018	Inception Date
Contrarian Partnership, LP	82	0.11	1.69	6.10	(13.68)	4.30	(10.04)	(16.12)	(14.95)	(8.48)	(4.51)	07/01/2013
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72	6.82	4.93	5.06	1.05	0.88	9.26	14.66	2.36	07/01/2013
Excess			(0.03)	(0.72)	(18.61)	(0.75)	(11.09)	(17.00)	(24.21)	(23.15)	(6.87)	
FCO MA Centre Street II ER	70	0.09	10.13	10.13		10.13	13.36					01/01/2020
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72	6.82		5.06	1.05					01/01/2020
Excess			8.41	3.31		5.08	12.32					
GCM Grosvenor NYCERS Emerging OFI Manager	4	0.01	0.00									08/01/2020
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72									08/01/2020
Excess			(1.72)									
Golden Tree OD	232	0.31	1.09	7.05	4.53	5.68	1.09	(0.64)	5.29	11.60	(1.71)	01/01/2012
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72	6.82	4.93	5.06	1.05	0.88	9.26	14.66	2.36	01/01/2012
Excess			(0.63)	0.23	(0.39)	0.62	0.04	(1.53)	(3.97)	(3.06)	(4.08)	
Maranon Partnership	81	0.11	0.89	(5.36)	(6.55)	(6.10)	(8.94)	0.83		7.72		09/01/2018
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72	6.82	4.93	5.06	1.05	0.88		14.66		09/01/2018
Excess			(0.83)	(12.18)	(11.48)	(11.16)	(9.99)	(0.06)		(6.94)		
Marathon Centre Street Partnership, L.P.	291	0.40	3.77	6.55	(3.80)	4.87	(1.26)	(7.08)	7.01	2.83	4.89	01/01/2012
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72	6.82	4.93	5.06	1.05	0.88	9.26	14.66	2.36	01/01/2012
Excess			2.05	(0.27)	(8.73)	(0.19)	(2.30)	(7.97)	(2.25)	(11.83)	2.53	
Oak Hill Ctr St Ptnrs	261	0.35	1.87	9.26	1.43	5.25	0.45	(2.14)	6.57	6.70	7.72	10/01/2012
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72	6.82	4.93	5.06	1.05	0.88	9.26	14.66	2.36	10/01/2012
Excess			0.15	2.43	(3.50)	0.20	(0.59)	(3.02)	(2.69)	(7.97)	5.36	
KKR NYC CREDIT A & B	202	0.27	7.08	(0.18)	3.05	7.08	2.70	(0.90)	9.16	2.39	26.55	12/01/2017
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72	6.82	4.93	5.06	1.05	0.88	9.26	14.66	2.36	12/01/2017
Excess			5.36	(7.01)	(1.88)	2.02	1.65	(1.78)	(0.10)	(12.28)	24.18	
KKR NYC Credit C	3	0.00										08/01/2020
Opportunistic Fixed Income JPMGHY / CSFB 50/50 Blend Plus 300			1.72									08/01/2020
Excess												
TOTAL EMPLOYEES ETI (w/o cash)	955	1.30	(0.27)	1.02	5.86	1.45	6.87	7.72	9.71	9.11	0.98	12/01/1984
Employees Custom Benchmark (No Cash)			(0.27)	0.64	5.73	0.40	5.28	7.39	7.20	7.62	1.01	12/01/1984
Excess			0.00	0.38	0.13	1.05	1.59	0.32	2.51	1.49	(0.03)	
AFL-CIO Housing Investment Trust	353	0.48	(0.17)	1.15	5.01	0.65	5.98	7.03	7.90	7.78	0.16	10/01/2002
BBG BARC Agg (Dly)			(0.81)	1.31	6.47	0.67	6.85	8.74	7.87	8.72	0.01	10/01/2002
Excess			0.63	(0.16)	(1.46)	(0.02)	(0.87)	(1.70)	0.03	(0.94)	0.15	
RBC Access MBS	181	0.25	0.11	0.94	6.50	0.76	5.99	7.55	6.83	7.21	0.49	03/01/2007
Access RBC Benchmark			(0.08)	0.11	4.85	0.16	4.62	6.29	6.27	6.05	1.17	03/01/2007
Excess			0.20	0.84	1.65	0.60	1.37	1.26	0.55	1.16	(0.69)	
CPC Construction Facility	8	0.01	0.25	0.48	1.44	0.34	0.64	3.17	4.21	5.04	4.14	08/01/2014
CPC CONST BENCHMARK			0.20	0.61	3.15	0.41	1.90	3.44	4.23	4.09	3.99	08/01/2014
Excess			0.05	(0.13)	(1.70)	(0.07)	(1.26)	(0.26)	(0.02)	0.95	0.15	

New York City Employees' Retirement System

Manager / Benchmark Comparison Report

Rates of Return - Net Mgr



Periods Ending August 31, 2020

	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/20	FYE 6/30/2019	CYE 12/31/2019	CYE 12/31/2018	Inception Date
CPC PPAR GNMA	76	0.10	0.06	1.07	5.66	1.53	7.24	5.56	8.96	4.76	0.86	12/01/1984
GNMA Plus 65bps			0.06	(0.21)	4.40	(0.11)	3.66	6.00	6.90	6.73	1.63	12/01/1984
Excess			0.00	1.28	1.26	1.64	3.58	(0.44)	2.06	(1.97)	(0.77)	
JPMC PPAR GNMA	32	0.04	0.11	1.27	6.51	1.46	7.38	6.64	9.37	5.77	1.99	11/01/2001
GNMA Plus 65bps			0.06	(0.21)	4.40	(0.11)	3.66	6.00	6.90	6.73	1.63	11/01/2001
Excess			0.05	1.48	2.10	1.57	3.71	0.64	2.47	(0.97)	0.36	
BOA PPAR GNMA	16	0.02	(0.06)	0.94	5.34	1.62	7.27	6.70	11.37	8.44	2.42	02/01/2011
GNMA Plus 65bps			0.06	(0.21)	4.40	(0.11)	3.66	6.00	6.90	6.73	1.63	02/01/2011
Excess			(0.11)	1.15	0.94	1.73	3.60	0.70	4.46	1.70	0.79	
BOA PPAR FNMA	25	0.03	(0.82)	0.67	5.77	2.79	7.85	9.05	13.51	13.54	2.33	12/01/2013
FNMA Plus 85bps			0.11	0.52	6.05	0.43	4.60	7.21	7.26	7.80	1.86	12/01/2013
Excess			(0.93)	0.15	(0.28)	2.35	3.25	1.85	6.25	5.74	0.47	
Citibank PPAR GNMA	6	0.01	0.05	1.13	5.81	1.69	7.68	5.89	10.12	5.33	1.90	12/01/2006
GNMA Plus 65bps			0.06	(0.21)	4.40	(0.11)	3.66	6.00	6.90	6.73	1.63	12/01/2006
Excess			(0.01)	1.34	1.41	1.80	4.01	(0.10)	3.21	(1.41)	0.27	
Citibank PPAR FNMA	27	0.04	(0.88)	0.76	9.83	2.93	8.83	15.33	15.16	19.71	2.63	12/01/2013
FNMA Plus 85bps			0.11	0.52	6.05	0.43	4.60	7.21	7.26	7.80	1.86	12/01/2013
Excess			(0.99)	0.24	3.78	2.50	4.22	8.12	7.90	11.91	0.77	
CFSB PPAR GNMA	3	0.00	0.05	1.07	5.94	1.56	7.28	5.97	9.78	5.91	0.99	10/01/2006
GNMA Plus 65bps			0.06	(0.21)	4.40	(0.11)	3.66	6.00	6.90	6.73	1.63	10/01/2006
Excess			(0.01)	1.27	1.54	1.67	3.61	(0.03)	2.87	(0.82)	(0.65)	
CPC PPAR FNMA	96	0.13	(0.75)	0.80	5.24	2.97	7.83	7.80	14.84	13.18	2.31	08/01/2013
FNMA Plus 85bps			0.11	0.52	6.05	0.43	4.60	7.21	7.26	7.80	1.86	08/01/2013
Excess			(0.86)	0.28	(0.81)	2.54	3.23	0.60	7.58	5.38	0.45	
ECLF PPAR FNMA	3	0.00	0.74	22.21		4.81						06/01/2020
FNMA Plus 85bps			0.11	0.52		0.43						06/01/2020
Excess			0.63	21.69		4.38						
JPMC PPAR FNMA	99	0.13	(0.84)	0.72	7.34	2.83	9.33	10.58	14.75	14.68	1.68	11/01/2013
FNMA Plus 85bps			0.11	0.52	6.05	0.43	4.60	7.21	7.26	7.80	1.86	11/01/2013
Excess			(0.95)	0.20	1.29	2.40	4.72	3.37	7.50	6.88	(0.18)	
LIIF PPAR GNMA	3	0.00	0.06	0.80	5.26	0.98	5.53	5.68	8.01	5.54	2.53	08/01/2009
GNMA Plus 65bps			0.06	(0.21)	4.40	(0.11)	3.66	6.00	6.90	6.73	1.63	08/01/2009
Excess			0.01	1.01	0.85	1.10	1.87	(0.32)	1.11	(1.19)	0.89	
LIIF PPAR FNMA	13	0.02	(0.84)	0.75	8.55	2.87	8.06	11.85	14.40	16.35	2.27	11/01/2013
FNMA Plus 85bps			0.11	0.52	6.05	0.43	4.60	7.21	7.26	7.80	1.86	11/01/2013
Excess			(0.95)	0.23	2.50	2.44	3.46	4.64	7.15	8.55	0.41	
LISC PPAR FNMA	2	0.00	(1.10)	0.70	10.08	3.07	12.49	14.27		14.95		11/01/2018
FNMA Plus 85bps			0.11	0.52	6.05	0.43	4.60	7.21		7.80		11/01/2018
Excess			(1.21)	0.18	4.03	2.64	7.88	7.06		7.15		
NCBCI PPAR FNMA	0	0.00	0.16	2.88	9.06	3.12	9.17	6.88	8.27	4.08	2.00	11/01/2013
FNMA Plus 85bps			0.11	0.52	6.05	0.43	4.60	7.21	7.26	7.80	1.86	11/01/2013
Excess			0.05	2.36	3.01	2.69	4.57	(0.33)	1.02	(3.72)	0.15	

New York City Employees' Retirement System

Manager / Benchmark Comparison Report

Rates of Return - Net Mgr



Periods Ending August 31, 2020

	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	Trailing 1 Year	FYTD	CYTD	FYE 6/30/20	FYE 6/30/2019	CYE 12/31/2019	CYE 12/31/2018	Inception Date
NCBCI PPAR GNMA	2	0.00	0.17	1.13	6.27	1.33	7.01	5.39	8.09	3.69	1.23	08/01/2009
GNMA Plus 65bps			0.06	(0.21)	4.40	(0.11)	3.66	6.00	6.90	6.73	1.63	08/01/2009
Excess			0.12	1.34	1.87	1.44	3.35	(0.61)	1.19	(3.04)	(0.41)	
NHS PPAR GNMA	0	0.00	0.20	2.76	4.85	1.34	5.87	3.60	7.31	2.90	0.54	10/01/2007
GNMA Plus 65bps			0.06	(0.21)	4.40	(0.11)	3.66	6.00	6.90	6.73	1.63	10/01/2007
Excess			0.14	2.97	0.44	1.45	2.20	(2.40)	0.41	(3.84)	(1.09)	
Wells Fargo PPAR FNMA	10	0.01	(1.06)	0.63	5.58	3.10	7.83	9.39	23.19	21.71		01/01/2017
FNMA Plus 85bps			0.11	0.52	6.05	0.43	4.60	7.21	7.26	7.80	1.86	01/01/2017
Excess			(1.17)	0.11	(0.47)	2.67	3.23	2.18	15.93	13.91		
NYCERS-TOTAL CASH	1,069	1.45	0.03	0.12	2.13	0.10	1.88	2.46	3.29	2.52	2.49	04/01/2004
ICE BofA US 3-Month Treasury Bill			0.01	0.04	1.26	0.03	0.62	1.63	2.31	2.28	1.87	04/01/2004
Excess			0.03	0.08	0.87	0.07	1.26	0.83	0.98	0.24	0.62	
Short Term NYCERS	1,069	1.45	0.01	0.06	1.08	0.04	0.46	1.44	2.36	2.30	1.95	04/01/1982
ICE BofA US 3-Month Treasury Bill			0.01	0.04	1.26	0.03	0.62	1.63	2.31	2.28	1.87	04/01/1982
Excess			0.00	0.02	(0.18)	0.01	(0.17)	(0.19)	0.05	0.01	0.07	
Cash Account	0	0.00										04/01/2004
KKR SP CASH ACCOUNT												
Securities Lending	0	0.00										04/01/2004
NYCERS-TOTAL PRIVATE EQUITY	5,126	6.96	6.97	9.55	7.84	9.85	4.73	1.83	13.54	11.30	16.05	04/01/2004
NYCERS-TOTAL PRIVATE REAL ESTATE	3,859	5.24	(0.18)	(1.07)	0.61	(0.50)	(1.63)	1.81	7.88	6.25	10.22	04/01/2004
NYCERS-TOTAL INFRASTRUCTURE	843	1.14	4.06	7.15	8.26	5.08	4.49	6.15	11.83	11.98	14.49	12/01/2013

New York City Employees' Retirement System
Private Equity Portfolio
As of March 31, 2020 (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	18,397,347	19,261,466	37,755,344	339,389	1.98x	24.6%	6.9%	17.7%
2000	Solera Partners, L.P.	5/26/2000	19,999,779	26,739,017	41,635,156	155,897	1.56x	7.4%	6.1%	1.3%
2000	SCP Private Equity Partners II, L.P.	6/15/2000	27,442,463	30,827,225	10,819,873	1,305,187	0.39x	(12.0%)	5.1%	(17.1%)
2001	Apollo Investment Fund V, L.P.	4/13/2001	40,000,000	62,528,643	123,295,865	345,286	1.98x	38.6%	8.3%	30.3%
2001	RRE Ventures III, L.P.	10/9/2001	19,999,999	26,323,260	34,078,940	1,070,321	1.34x	5.4%	6.5%	(1.1%)
2002	Thomas, McVerney & Partners, L.P.	10/9/2002	20,000,000	20,000,000	10,078,105	2,289,408	0.62x	(7.30%)	10.1%	(17.4%)
2003	FS Equity Partners V, L.P.	1/20/2003	25,000,000	21,419,958	41,861,469	1,448,989	2.02x	15.3%	4.8%	10.5%
2003	Blackstone Capital Partners IV, L.P.	2/26/2003	34,418,762	38,818,072	100,181,154	3,872	2.58x	39.7%	7.6%	32.2%
2003	Ares Corporate Opportunities Fund, L.P.	4/1/2003	45,000,000	53,984,770	80,476,920	116,250	1.49x	13.1%	7.4%	5.7%
2004	Markstone Capital Partners, LP	1/30/2004	40,000,000	46,899,103	19,822,611	272,215	0.43x	(38.4%)	10.3%	(48.6%)
2004	Fdg Capital Partners II LP	8/30/2004	35,000,000	37,714,408	43,600,092	2,046,805	1.21x	3.7%	6.6%	(3.0%)
2004	Lincolnshire Equity Fund III, L.P.	10/1/2004	55,000,000	55,006,941	78,246,227	20,586,813	1.80x	28.0%	10.2%	17.9%
2004	Yucapa American Alliance Fund I, LP	10/1/2004	90,000,000	114,094,892	137,148,067	6,234,228	1.26x	1.10x	4.6%	10.3%
2004	New York/Fairview Emerging Managers Fund, L.P.-Tranche 1	10/21/2004	32,000,000	32,862,069	32,638,618	3,427,513	1.00x	1.6%	8.4%	(6.8%)
2005	Palladium Equity Partners III, L.P.	11/12/2004	35,000,000	36,490,865	69,842,472	723,899	1.94x	13.6%	4.4%	9.2%
2005	New Mountain Partners II, L.P.	1/12/2005	46,451,615	42,071,397	81,045,604	691,971	1.25x	3.6%	4.7%	(1.1%)
2005	NB New York City Growth Fund	8/16/2005	34,819,694	34,819,694	43,953,118	392,685	1.15x	3.1%	10.2%	(7.1%)
2005	Snow Phipps Group, L.P.	9/7/2005	20,000,000	23,827,483	20,914,615	292,735	1.36x	8.0%	3.8%	4.2%
2005	Blackstone Mezzanine Partners II, L.P.	10/10/2005	21,346,698	23,488,553	31,752,958	32,932,158	1.37x	4.2%	7.0%	(2.8%)
2005	Psilos Group Partners III, L.P.	10/24/2005	35,000,000	37,205,819	17,948,760	9,107,224	1.27x	4.0%	7.6%	(3.5%)
2005	USPF II Institutional Fund, L.P.	11/23/2005	65,000,000	85,734,194	99,947,469	9,400,928	1.28x	4.6%	10.3%	(5.8%)
2005	JP Morgan Fleming (Tranche A)	12/21/2005	43,000,000	42,970,926	45,698,840	300,551	1.03x	0.5%	7.9%	(7.4%)
2006	Aisling Capital II, LP	1/12/2006	6,680,102	7,854,064	7,775,060	[31,027]	1.01x	0.2%	9.8%	(19.3%)
2006	InterMedia Partners VII, L.P.	1/20/2006	25,000,000	29,229,224	29,591,747	3,386,875	0.45x	(9.5%)	10.4%	7.9%
2006	Terra Firma Capital Partners III, L.P.	3/8/2006	52,767,569	53,495,701	20,738,439	22,660,627	2.69x	18.3%	6.3%	7.0%
2006	BDCM Opportunity Fund II, L.P.	3/29/2006	25,000,000	37,091,747	77,430,266	3,501,417	1.62x	7.9%	6.2%	(1.9%)
2006	Blackstone Capital Partners V, L.P.	4/13/2006	121,624,827	129,501,303	205,725,239	839,455	1.23x	4.4%	6.2%	(1.9%)
2006	Avista Capital Partners, LP	4/27/2006	45,000,000	59,165,902	72,036,625	1,712,766	1.51x	8.7%	7.6%	1.1%
2006	Apollo Investment Fund VI, L.P.	5/10/2006	90,000,000	115,838,440	173,338,314	2,519,819	1.32x	5.4%	6.7%	(1.3%)
2006	Landmark Equity Partners XIII, L.P.	5/11/2006	50,000,000	48,059,342	61,032,858	86,418	1.67x	13.1%	3.8%	9.3%
2006	Ares Corporate Opportunities Fund II, L.P.	5/23/2006	50,000,000	54,760,870	91,354,618	16,739,523	2.13x	13.9%	11.3%	2.6%
2006	Fairview Ventures Fund III, L.P.	6/29/2006	25,000,000	25,000,000	55,468,323	19,884,774	3.01x	16.8%	8.1%	8.7%
2006	Amersand 2006	8/14/2006	25,000,000	25,000,000	40,243,613	2,314,076	2.27x	16.7%	11.4%	5.3%
2006	Thomas, McVerney & Partners II, L.P.	11/30/2006	25,000,000	25,349,167	55,110,685	13,858,732	1.84x	11.3%	8.4%	2.9%
2006	Catterton Partners VI, L.P.	12/14/2006	45,000,000	51,243,868	80,464,404	[13,432]	0.63x	(10.7%)	6.9%	(17.6%)
2006	First Reserve Fund XI, L.P.	4/10/2006	45,000,000	47,820,682	30,351,088	193,886	1.94x	12.1%	12.0%	0.1%
2006	Arsenal Capital Partners II, LP	12/19/2006	22,500,000	27,438,944	53,113,671	27,949,448	1.35x	4.2%	9.6%	(5.4%)
2006	RRE Ventures IV, L.P.	12/19/2006	35,000,000	44,486,047	32,241,398	7,389,506	2.07x	12.9%	9.6%	3.3%
2006	MidOcean Partners III, L.P.	12/21/2006	58,234,777	69,571,229	136,605,728	8,794,744	1.72x	11.6%	11.5%	0.0%
2006	GF Capital Private Equity Fund, L.P.	12/22/2006	20,000,000	20,729,120	26,863,570	(43,654)	1.44x	7.4%	7.5%	(0.2%)
2006	The Fourth Craven Fund	1/22/2007	69,453,013	72,910,892	105,361,467	6,152,133	0.93x	(1.4%)	10.8%	(12.2%)
2007	Pegasus Partners IV, L.P.	1/29/2007	30,000,000	36,450,033	27,600,933	5,710,194	2.14x	15.6%	6.6%	6.9%
2007	FTVentures III, LP	3/1/2007	24,201,990	26,802,873	51,561,752	922,308	1.26x	4.5%	15.2%	(10.7%)
2007	Co-Investment Partners Europe, L.P.	3/19/2007	39,950,623	42,601,283	52,846,040	15,575,155	1.33x	4.1%	9.1%	(4.9%)
2007	Montreux Equity Partners IV, L.P.	3/27/2007	20,000,000	20,000,000	11,044,696	2,643,614	1.03x	0.6%	12.3%	(11.7%)
2007	Quaker BioVentures II, L.P.	3/30/2007	20,000,000	19,256,740	17,160,674	7,872,374	0.39x	(10.1%)	4.9%	(7.0%)
2007	SCP VitaLife Partners II Fund	4/13/2007	20,000,000	20,099,698	1,579	6,092,073	2.35x	18.6%	11.6%	15.9%
2007	Nautic Partners VI, L.P.	5/14/2007	30,000,000	33,578,877	72,966,765	7,428,810	0.76x	(4.2%)	15.9%	(20.1%)
2007	Constellation Venture Capital III, L.P.	5/22/2007	25,000,000	28,826,564	14,520,432	14,034,471	1.21x	3.5%	9.1%	(5.6%)
2007	United States Power Fund III, L.P.	6/28/2007	65,000,000	76,903,642	79,335,129	5,694,238	1.49x	6.9%	9.5%	(2.5%)
2007	Haydard Capital Fund II, L.P.	7/2/2007	25,000,000	21,642,962	26,458,033	8,598,817	1.77x	13.6%	10.7%	2.8%
2007	Carlyle Partners V, L.P.	7/6/2007	70,000,000	72,144,879	119,299,326	11,248,482	0.40x	(12.2%)	12.8%	(25.0%)
2007	PGC Clean Energy & Technology Fund (East), LLC	7/6/2007	90,000,000	81,429,594	20,959,123	459,913	1.43x	17.3%	10.1%	7.2%
2007	GSO Capital Opportunities Fund LP	7/16/2007	45,000,000	67,377,298	95,627,284	12,419,123	0.93x	(1.0%)	12.8%	(13.8%)
2007	StarVest Partners II, L.P.	8/1/2007	25,000,000	25,159,680	11,051,008	2,388,225	2.01x	12.8%	11.4%	1.4%
2007	New Mountain Partners III, L.P.	8/9/2007	100,000,000	101,866,058	135,606,735	69,284,489	2.01x	26.9%	9.7%	17.2%
2007	Vista Equity Partners Fund III, L.P.	10/3/2007	30,000,000	32,211,364	76,619,901	5,679,455	1.55x	13.3%	10.8%	3.5%
2007	Trilantic Capital Partners IV L.P.	10/22/2007	69,028,637	72,053,009	106,275,810	8,989,110	1.56x	9.3%	12.8%	(3.5%)
2007	RU Equity Partners Fund I, L.P.	11/30/2007	20,000,000	21,991,729	25,278,082	1,268,286	1.28x	6.8%	11.9%	(5.1%)
2007	Pine Brook Capital Partners, L.P.	1/11/2008	30,000,000	34,068,301	42,439,115	50,923,416	1.97x	12.0%	9.9%	2.1%
2008	Paladin III (NY City), LP	1/8/2008	30,000,000	41,065,348	29,908,122	10,514,622	1.25x	2.2%	14.0%	(10.8%)
2008	Apollo Investment Fund VII, L.P.	1/28/2008	100,000,000	122,607,930	194,234,435	4,230,492	1.04x	1.0%	13.6%	(12.6%)
2008	NGN BioMed Opportunity II, L.P.	2/11/2008	20,000,000	19,151,821	13,346,209	105,253,991	1.60x	8.5%	11.0%	(2.6%)
2008	Riverstone/Carlyle Global Energy & Power Fund IV, L.P.	3/3/2008	45,000,000	52,130,513	49,839,670	2,954,590	1.66x	18.0%	14.0%	4.0%
2008	Yucapa American Alliance Fund II, LP	4/8/2008	120,000,000	164,699,094	158,448,212	54,192,181	2.41x	17.9%	10.4%	7.5%
2008	Levine Leichtman Capital Partners IV, L.P.	5/28/2008	35,000,000	47,747,097	59,342,785	8,565,884	0.80x	(3.2%)	11.7%	(15.0%)
2008	New York/Fairview Emerging Managers Fund, L.P.-Tranche 2	5/28/2008	45,000,000	44,996,824	54,273,303	40,347,825	2.48x	19.1%	11.8%	7.3%
2008	Yucapa Corporate Initiatives Fund II, LP	6/23/2008	42,092,788	41,334,383	24,681,671	464,922	1.57x	13.0%	15.3%	(2.3%)
2008	Leeds Equity Partners V, L.P.	7/28/2008	60,000,000	56,925,672	100,736,082	10,769,094	2.10x	20.1%	11.8%	8.3%
2008	GI Partners Fund III L.P.	7/29/2008	45,000,000	48,618,007	75,820,271	31,426,011	1.67x	11.1%	11.8%	(0.7%)
2008	Ares Corporate Opportunities Fund III, L.P.	7/30/2008	75,000,000	91,601,878	181,997,287	17,848,366	1.56x	11.3%	11.2%	0.2%
2008	GCM Grosvenor NYCERS Emerging Manager Fund, L.P.	8/22/2008	116,737,374	145,295,666	132,122,018	82,843,880	1.51x	10.0%	11.5%	(1.5%)
2008	First Reserve Fund XII, L.P.	8/25/2008	45,000,000	49,986,866	24,984,152	4,956,451	0.60x	(12.0%)	16.6%	(28.6%)
2008	Landmark Equity Partners XIV, L.P.	9/19/2008	109,129,000	106,281,905	122,818,826	16,801,573	1.31x	9.5%	13.7%	(4.2%)
2008	Crestview Partners II, L.P.	10/1/2008	50,000,000	58,173,241	75,111,544	17,311,065	1.59x	11.8%	13.8%	(2.0%)
2008	Avista Capital Partners II, L.P.	11/5/2008	75,000,000	98,630,998	154,561,847	5,706,228	1.62x	14.4%	14.6%	(0.2%)
2008	Blue Wolf Capital Fund II, L.P.	11/14/2008	25,000,000	27,167,904	31,424,990	10,115,606	1.53x	9.2%	14.5%	(5.3%)
2008	Bridgepoint Europe IV	11/14/2008	26,651,054	27,047,550	36,527,697	3,811,459	1.49x	9.5%	14.4%	(5.0%)
2008	Aisling Capital III, LP	11/20/2008	14,000,000	15,791,357	36,200,825	706,520	2.34x	25.9%	14.1%	11.8%
2008	Onex Partners III LP	12/10/2008	75,000,000	82,021,561	109,150,924	16,167,791	1.53x	10.6%	14.5%	(3.8%)
2009	Welsh, Carson, Anderson & Stowe XI, L.P.	2/10/2009	40,000,000	40,000,000	52,090,182	11,573,357	1.59x	11.4%	14.0%	(2.6%)
2009	FS Equity Partners VI, L.P.	7/27/2009	32,500,000	32,686,538	77,082,403	15,960,061	2.85x	22.0%	13.9%	9.1%
2009	Lincolnshire Equity Fund IV, L.P.	8/5/2009	27,500,000	29,485,262	33,966,934	10,913,125	1.52x	13.7%	13.5%	0.2%
2009	Lexington Capital Partners VII, L.P.	12/3/2009	50,000,000	44,615,537	59,452,193	10,358,588	1.56x	8.8%	11.8%	(3.0%)
2010	Snow Phipps II, L.P.	1/8/2010	30,000,000	35,891,999	32,434,602	16,200,413	1.36x	9.5%	11.2%	(1.7%)
2010	JP Morgan Fleming (Tranche B)	2/26/2010	35,000,000	36,141,021	29,048,097	27,575,850	1.57x	10.7%	11.2%	(0.5%)
2010	Trident V, L.P.	4/29/2010	110,000,000	128,329,564	144,999,438	61,928,112				

New York City Employees' Retirement System
Private Equity Portfolio
As of March 31, 2020 (in USD)

Vintage Year	Investment	First Drawdown	Committed Capital	Contributed Capital	Distributed Capital	Market Value	Multiple	IRR ¹	PME Benchmark ²	PME Spread ³
2014	Carlyle Partners VI, L.P. (Side Car)	9/23/2014	8,250,000	5,998,063	345,832	5,043,829	0.90x	(2.7%)	7.3%	(10.0%)
2013	Landmark Equity Partners XV, L.P.	10/30/2013	75,000,000	56,752,308	43,024,839	31,049,568	1.31x	12.5%	7.1%	5.4%
2013	Apollo Investment Fund VIII, L.P.	12/11/2013	140,000,000	129,404,273	62,886,790	96,015,667	1.23x	7.2%	7.3%	(0.1%)
2013	Landmark - NYC Fund I, L.P.	12/24/2013	25,000,000	22,219,663	16,616,276	14,618,824	1.41x	13.6%	5.5%	8.0%
2014	CVC Capital Partners VI, L.P.	2/18/2014	123,407,118	124,240,622	60,304,450	125,453,687	1.50x	15.2%	5.2%	10.0%
2013	Crestview Partners III, L.P.	3/3/2015	66,000,000	46,474,928	28,162,900	29,661,582	1.24x	9.1%	7.2%	1.9%
2013	Crestview Partners III (Co-Investment B), L.P.	12/17/2015	22,000,000	22,781,960	1,085,940	19,074,430	0.88x	(4.5%)	5.6%	(10.1%)
2014	Olympus Growth Fund VI, L.P.	1/21/2014	75,000,000	71,282,570	37,018,141	52,898,192	1.26x	10.2%	6.6%	3.5%
2014	ASF VI B L.P.	5/9/2014	83,000,000	67,031,813	71,760,775	20,780,699	1.38x	11.5%	10.3%	1.2%
2014	ASF VI B NYC Co-Invest L.P.	5/9/2014	27,000,000	21,668,384	21,416,763	8,916,076	1.40x	11.8%	7.0%	4.8%
2014	Vista Equity Partners Fund V, L.P.	9/8/2014	125,000,000	152,463,346	149,982,525	123,792,608	1.80x	20.3%	7.2%	13.1%
2014	Lexington Capital Partners VIII, L.P.	1/8/2015	110,000,000	98,663,231	52,853,548	75,235,873	1.30x	15.1%	4.4%	10.7%
2015	Siris Partners III, L.P.	5/4/2015	31,000,000	31,999,257	14,839,419	25,542,304	1.26x	12.2%	3.8%	8.4%
2015	Centerbridge Capital Partners III, L.P.	5/21/2015	23,700,000	19,380,482	8,290,224	17,678,801	1.34x	14.1%	3.4%	10.7%
2015	Welsh, Carson, Anderson & Stowe XII, L.P.	8/26/2015	78,500,000	69,158,151	39,614,098	67,566,572	1.55x	21.4%	4.2%	17.2%
2015	Warburg Pincus Private Equity XII, L.P.	12/21/2015	205,500,000	196,742,711	19,394,745	220,622,848	1.22x	10.1%	0.6%	9.6%
2015	ASF VII B L.P.	12/29/2015	94,500,000	53,419,147	10,322,550	54,595,345	1.22x	13.0%	0.6%	12.4%
2015	ASF VII B NYC Co-Invest L.P.	12/29/2015	46,000,000	26,990,678	7,186,542	35,335,340	1.62x	26.9%	(2.5%)	29.4%
2015	EQT VII, L.P.	1/8/2016	162,492,318	158,770,533	73,762,723	136,490,020	1.32x	13.5%	4.2%	9.3%
2015	American Securities Partners VII, L.P.	1/19/2016	80,000,000	68,651,108	10,346,374	43,270,579	0.78x	(12.0%)	5.2%	(17.2%)
2015	Bridgepoint Europe V L.P.	2/8/2016	61,924,721	60,753,881	21,805,063	53,844,848	1.25x	10.1%	4.5%	5.7%
2015	Bridgepoint Europe V Co-Invest	8/16/2016	18,298,705	17,018,173	7,473,389	21,607,973	1.71x	24.6%	0.7%	23.9%
2015	NYCERS - 2015 Emerging Manager Program ⁵	2/22/2016	179,750,000	98,340,728	16,714,278	100,028,183	1.19x	13.5%	(4.1%)	17.5%
2016	Vista Equity Partners Fund VI, L.P.	6/28/2016	158,000,000	173,834,706	39,435,462	191,512,439	1.33x	13.2%	3.4%	9.8%
2016	Platinum Equity Capital Partners IV, L.P.	3/21/2017	111,000,000	97,345,592	28,667,835	76,321,093	1.08x	5.4%	(1.1%)	6.5%
2018	Platinum Equity Capital Partners IV Co-Investment, L.P.	9/7/2018	16,000,000	11,221,788	2,232,710	7,922,348	0.90x	NM	NM	N/A
2016	Apax IX USD, L.P.	5/12/2017	127,000,000	117,287,006	3,339,596	141,664,535	1.24x	15.2%	(4.7%)	19.9%
2017	Green Equity Investors VII, L.P.	5/12/2017	95,000,000	73,725,205	850,979	83,273,691	1.14x	8.3%	(3.8%)	12.1%
2017	Ares Corporate Opportunities Fund V, L.P.	6/22/2017	95,000,000	81,836,517	10,184,606	71,994,525	1.00x	0.3%	(4.7%)	5.0%
2017	KKR Americas Fund XII, L.P.	10/31/2017	158,000,000	75,685,379	1,041,587	82,706,093	1.11x	7.2%	(4.6%)	11.8%
2017	BC European Capital X	12/14/2017	88,157,240	75,467,200	1,474,643	74,264,396	1.00x	0.3%	(8.8%)	9.1%
2017	BCEC X Co-Investment	3/24/2017	35,746,976	33,034,003	225,066	36,425,142	1.11x	7.0%	(7.1%)	14.1%
2017	Warburg Pincus Financial Sector, L.P.	1/5/2018	104,000,000	57,377,156	5,304,000	54,569,359	1.04x	4.0%	(7.0%)	11.0%
2018	Platinum Equity Small Cap Fund, L.P.	6/27/2018	41,000,000	9,211,894	-	3,257,270	0.35x	NM	NM	N/A
2018	EQT VIII, L.P.	8/10/2018	107,842,262	48,342,363	1,344,326	50,924,736	1.08x	NM	NM	N/A
2018	EQT VIII Co-Investment	11/2/2018	39,269,784	21,743,982	-	23,105,010	1.06x	NM	NM	N/A
2018	CVC Capital Partners VII, L.P.	12/4/2018	151,722,161	76,421,174	1,072,174	74,487,460	0.99x	NM	NM	N/A
2017	Palladium Equity Partners V, L.P.	2/11/2019	33,333,333	11,134,423	111,150	8,926,724	0.81x	NM	NM	N/A
2018	Vista Equity Partners Fund VII, L.P.	2/13/2019	177,500,000	44,802,080	136,669	41,661,343	0.93x	NM	NM	N/A
2019	Welsh, Carson, Anderson & Stowe XIII, L.P.	3/14/2019	89,000,000	5,566,090	-	2,787,561	0.50x	NM	NM	N/A
2018	Siris Partners IV, L.P.	3/15/2019	89,000,000	40,933,612	-	33,611,267	0.82x	NM	NM	N/A
2018	Apollo Investment Fund IX, L.P.	3/15/2019	256,000,000	46,414,106	373,941	41,913,758	0.91x	NM	NM	N/A
2019	ASF VIII B L.P.	3/15/2019	174,000,000	41,293,567	510	44,522,233	1.08x	NM	NM	N/A
2019	ASF VIII B NYC Co-Invest L.P.	3/15/2019	87,000,000	4,251,556	-	6,926,158	1.63x	NM	NM	N/A
2019	Warburg Pincus Global Growth, L.P.	3/26/2019	125,500,000	23,573,714	-	21,784,323	0.92x	NM	NM	N/A
2018	Bridgepoint Europe VI	4/1/2019	117,176,033	23,090,498	-	20,361,447	0.88x	NM	NM	N/A
2018	Bridgepoint Europe VI Co-Invest	5/7/2019	29,372,115	6,924,585	-	5,809,841	0.84x	NM	NM	N/A
2019	Trilantic Capital Partners VI (North America) L.P.	8/8/2019	51,000,000	10,232,641	11,199	7,475,637	0.73x	NM	NM	N/A
2019	NYCERS - 2019 Emerging Manager Program ⁶	9/25/2019	226,650,000	10,962,480	606,411	11,104,307	1.07x	NM	NM	N/A
2019	Lexington Capital Partners IX	12/20/2019	106,500,000	7,542,331	1,343,798	11,022,430	1.64x	NM	NM	N/A
2019	Platinum Equity Capital Partners V, L.P.	12/27/2019	157,000,000	17,911,975	-	13,467,004	0.75x	NM	NM	N/A
2019	KKR European Fund V (USD)	1/15/2020	83,250,000	9,477,280	-	5,787,551	0.61x	NM	NM	N/A
2020	FTV VI	3/18/2020	21,500,000	1,720,000	-	1,635,110	0.95x	NM	NM	N/A
2019	Apax X USD L.P.	N/A	104,500,000	-	-	(1,796,098)	-	N/A	N/A	N/A
2019	Blackstone Capital Partners VIII L.P.	N/A	109,000,000	-	-	(162,313)	-	N/A	N/A	N/A
2019	Crestview Partners IV, L.P.	N/A	71,000,000	-	-	18,124	-	NM	NM	N/A
2019	Crestview Partners IV (Co-Investment), L.P.	N/A	23,666,667	-	-	38,346	-	NM	NM	N/A
2019	Lexington IX Co-Invest	N/A	35,500,000	-	-	(33,533)	-	N/A	N/A	N/A
2019	Lindsay Goldberg V	N/A	87,000,000	-	-	-	-	N/A	N/A	N/A
2020	Clearlake Capital Partners VI, L.P.	N/A	47,000,000	-	-	-	-	N/A	N/A	N/A
2020	Green Equity Investors VIII, L.P.	N/A	109,000,000	-	-	-	-	N/A	N/A	N/A
2020	Green Equity Investors VIII Coinvest N, L.P.	N/A	36,300,000	-	-	-	-	N/A	N/A	N/A
2020	Platinum Equity Capital Partners V Co-Investment, L.P.	N/A	39,250,000	-	-	-	-	N/A	N/A	N/A
Total Portfolio⁷			\$ 12,292,776,649	\$ 10,180,786,334	\$ 9,711,879,533	\$ 4,617,317,461	1.41x	9.3%	9.0%	0.2%

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	Hg Genesis 9	N/A	\$ 49,513,592	\$ -	\$ -	\$ -	N/A	N/A	N/A	N/A
2020	One Rock Capital Partners III	N/A	43,000,000	-	-	-	N/A	N/A	N/A	N/A
2020	CVC Capital Partners VIII	N/A	171,461,290	-	-	-	N/A	N/A	N/A	N/A
2020	Stellex Capital Partners II	N/A	51,500,000	-	-	-	N/A	N/A	N/A	N/A
2020	BC Partners XI	N/A	110,000,000	-	-	-	N/A	N/A	N/A	N/A
2020	BC Partners XI Metro Co-Invest	N/A	50,000,000	-	-	-	N/A	N/A	N/A	N/A
2020	EQT IX	N/A	92,125,000	-	-	-	N/A	N/A	N/A	N/A
Total Commitments Closed Subsequent to as of Date			\$ 567,599,882	\$ -	\$ -	\$ -	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 NYCERS - 2012 Emerging Manager Program includes the total commitment amount of \$139.6 million. The Program's original commitment amount of \$150 million was subsequently revised to \$139.6 million, all of which has been committed as of March 31, 2020. The remaining \$10.4 million was reallocated to the NYCERS - 2015 Emerging Manager Program.

⁵ NYCERS - 2015 Emerging Manager Program includes the total commitment amount of \$179.8 million. The Program's original commitment amount of \$190.4 million, which included the original \$180.0 million commitment and the \$10.4 million reallocation from the NYCERS - 2012 Emerging Manager Program, was subsequently revised to \$179.8 million. As of March 31, 2020, all \$179.8 million has been committed, and the remaining \$10.7 million was reallocated to the NYCERS - 2019 Emerging Manager Program.

⁶ NYCERS - 2019 Emerging Manager Program commitment amount totals \$226.7 million, which includes the Program's original \$216.0 million commitment and the \$10.7 million reallocation from the NYCERS - 2015 Emerging Manager Program. As of March 31, 2020, \$45.0 million has been committed.

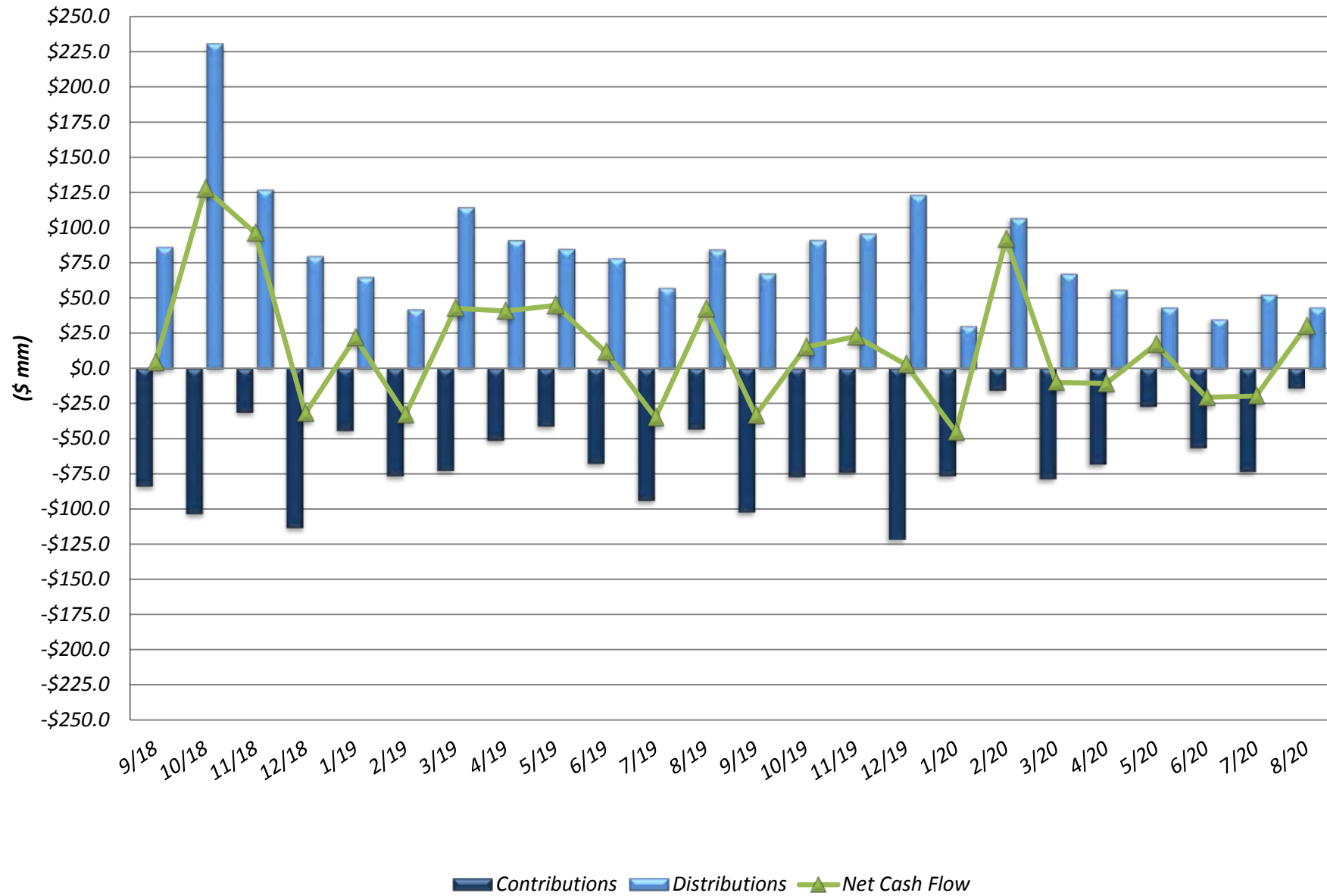
⁷ Total Portfolio includes liquidated investments.

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 L-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 Employees' Retirement System, 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.

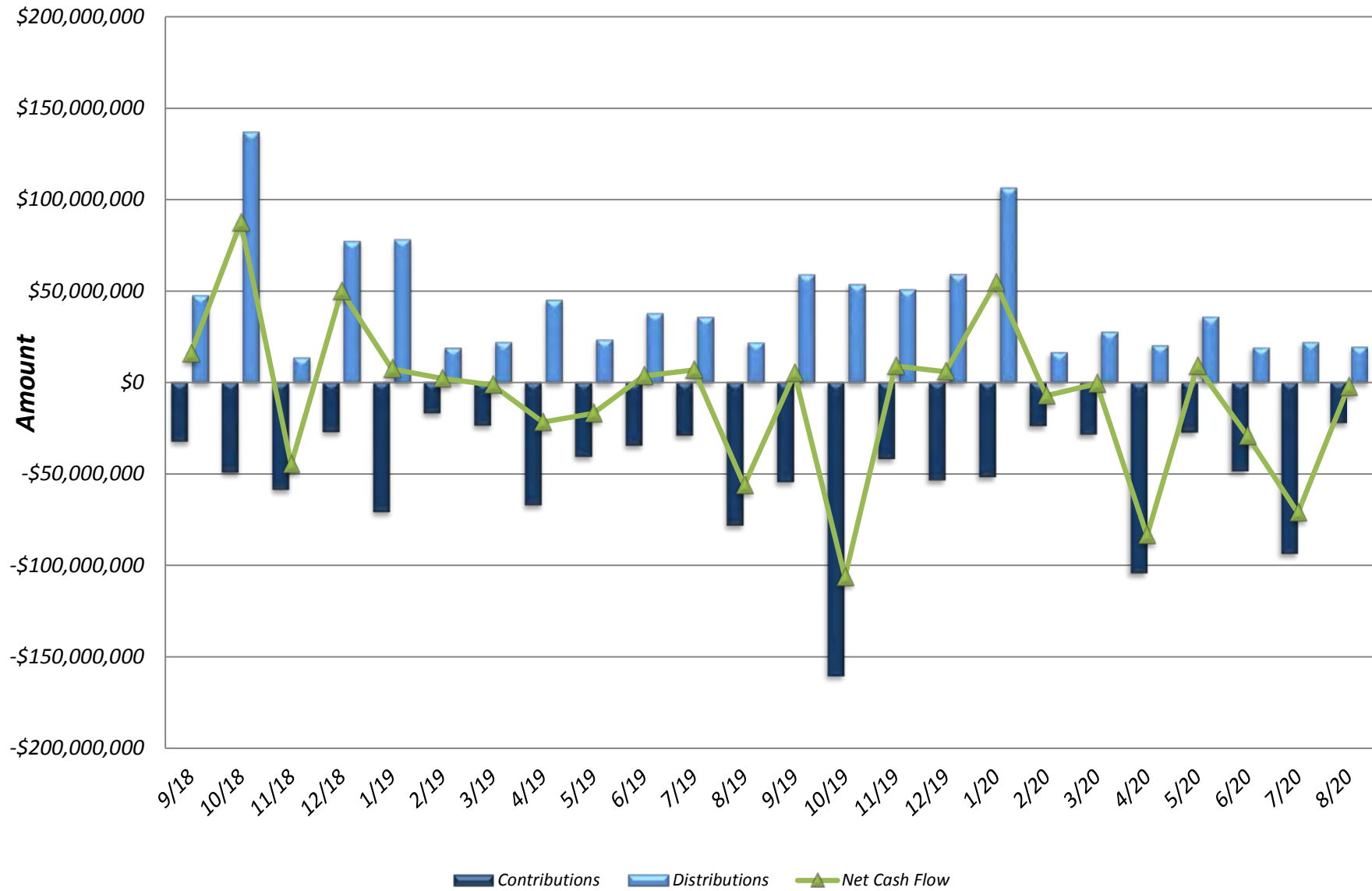
**NYCERS Monthly PE Cash Flow Summary
(as of August 31, 2020)**



Investments by Strategy	Vintage Year	First Draw- down	Committed Capital	Contributions	Distributions	Market Value	Unfunded Commitment	Equity Multiple	IRR
Almanac Realty Securities VII	2015	4/2015	65,000,000	52,484,831	42,894,117	26,611,982	21,085,634	1.32x	12.9%
Almanac Realty Securities VII (Sidecar IV)	2015	12/2015	20,000,000	12,111,124	10,017,361	7,299,674	8,529,290	1.43x	16.4%
Almanac Realty Securities VIII	2018	12/2018	51,000,000	6,273,289	368,970	4,559,774	45,007,826	0.79x	-39.9%
Almanac Realty Securities VIII (Sidecar II)	2018	12/2018	34,000,000	3,995,312	148,087	3,592,518	30,055,421	0.94x	-11.7%
Artemis Co-Investment ¹	2016	2/2016	53,000,000	60,819,633	23,935,107	50,439,052	4,668,866	1.22x	13.9%
Artemis Income and Growth Fund	2018	10/2019	61,000,000	12,022,478	15,865	10,996,047	48,977,522	0.92x	NM
Brookfield Premier Real Estate Partners	2016	11/2016	91,000,000	103,268,842	12,268,842	125,590,858	-	1.33x	10.7%
Carlyle Property Investors	2017	7/2017	91,000,000	100,515,208	9,515,208	107,255,890	-	1.16x	6.9%
Exeter Core Industrial Club Fund II	2016	5/2016	28,000,000	26,908,000	4,257,804	28,005,804	1,092,000	1.20x	9.8%
Exeter Core Industrial Fund III	2019	2/2020	72,100,000	8,291,500	-	7,053,006	63,808,500	0.85x	NM
Harrison Street Core Property Fund	2019	10/2019	90,000,000	91,428,332	1,428,332	92,919,725	-	1.03x	NM
Harrison Street Core Property Fund Co-Investment	2019	5/2019	45,000,000	28,794,439	399,533	29,549,110	16,601,942	1.04x	NM
Heitman America Real Estate Trust, L.P.	2007	3/2007	115,000,000	196,253,401	81,253,401	250,262,777	-	1.69x	7.0%
Heitman Core Real Estate Debt Income Trust ²	2018	11/2018	127,000,000	48,655,793	3,655,793	48,782,020	82,000,000	1.08x	6.6%
Jamestown Premier Property Fund	2016	2/2016	48,721,196	51,659,076	20,673,007	40,864,326	4,856,103	1.19x	7.3%
JP Morgan Special Situation Property Fund	2007	1/2007	90,000,000	114,214,259	50,117,806	133,772,774	-	1.61x	4.8%
JP Morgan Strategic Property Fund	2006	12/2006	136,000,000	183,466,289	116,500,472	235,652,892	-	1.92x	6.8%
LaSalle Property Fund	2010	7/2010	132,000,000	131,690,926	22,650,782	153,935,117	0	1.34x	9.2%
Lion Industrial Trust	2017	1/2017	90,000,000	100,692,691	10,692,691	130,058,024	-	1.40x	15.2%
MetLife Core Property Fund	2014	7/2014	50,000,000	50,000,000	12,186,113	64,205,433	-	1.53x	9.1%
NYC Asset Investor #2	2013	7/2013	75,000,000	76,276,228	32,373,418	55,508,933	2,407,953	1.15x	3.6%
PRISA	2006	9/2006	86,000,000	92,673,389	39,246,358	124,602,426	-	1.77x	4.9%
PRISA II	2007	6/2007	141,518,761	150,922,667	55,249,040	219,207,016	-	1.82x	5.8%
Prologis Targeted US Logistics Fund	2006	10/2006	25,000,000	34,540,366	13,015,886	52,730,016	-	1.90x	6.3%
RREEF America REIT II	2006	10/2006	86,000,000	113,537,802	62,665,130	127,658,198	-	1.68x	5.3%
UBS Trumbull Property Fund	2006	9/2006	156,000,000	250,781,632	263,381,168	121,221,476	-	1.53x	5.8%
USAA Eagle Real Estate Fund	2015	12/2015	90,000,000	97,729,074	7,737,118	109,444,851	-	1.20x	7.1%
Core / Core Plus Portfolio	2006		2,149,339,957	2,200,066,581	896,647,411	2,361,779,718	329,091,058	1.48x	6.3%
Aermont Capital Real Estate Fund IV	2018	4/2019	72,958,681	12,532,536	-	4,329,690	60,426,145	0.35x	NM
American Value Partners Fund I ¹	2007	10/2007	55,000,000	39,320,163	41,373,738	3,520,185	15,679,837	1.14x	2.8%
Apollo Real Estate Investment Fund V	2006	6/2006	25,000,000	25,000,000	28,596,713	517,247	2,500,000	1.16x	1.9%
Ares European Real Estate Fund III	2008	5/2008	30,000,000	30,487,501	33,437,499	324,552	-	1.11x	2.6%
Avanath Affordable Housing II ¹	2015	7/2015	8,000,000	8,191,825	2,550,102	10,591,573	222,091	1.60x	11.8%
Basis Investment Group Real Estate Fund I ^{1,2}	2017	11/2017	17,000,000	11,772,439	4,101,204	9,173,112	7,825,568	1.13x	11.4%
Blackstone Real Estate Partners Europe III - USD	2008	10/2008	50,000,000	52,174,339	71,152,942	6,332,605	6,615,496	1.49x	10.8%
Blackstone Real Estate Partners Europe IV L.P. - USD	2013	12/2013	169,000,000	168,046,563	192,089,961	58,367,043	30,599,402	1.49x	14.0%
Blackstone Real Estate Partners Europe VI L.P.	2019	11/2019	99,000,000	6,670,402	-	6,028,666	92,329,598	0.90x	NM
Blackstone Real Estate Partners IV L.P.	2004	5/2004	30,000,000	38,393,533	53,242,888	876,561	-	1.41x	10.1%
Blackstone Real Estate Partners IX L.P.	2019	9/2019	166,000,000	29,922,337	1,047,106	27,810,189	137,156,686	0.96x	NM
Blackstone Real Estate Partners VI L.P.	2007	7/2006	110,000,000	123,465,884	240,929,611	5,541,644	5,618,578	2.00x	13.3%
Blackstone Real Estate Partners VII L.P.	2012	4/2012	170,000,000	212,052,406	272,936,010	70,971,892	23,401,975	1.62x	15.9%
Blackstone Real Estate Partners VIII L.P.	2015	8/2015	151,000,000	159,033,965	62,281,023	140,886,296	29,750,217	1.28x	12.6%
Brookfield Strategic Real Estate Partners	2012	9/2012	100,000,000	119,640,559	176,681,925	54,111,944	12,631,673	1.93x	19.9%
Brookfield Strategic Real Estate Partners III, L.P.	2018	4/2019	170,000,000	55,820,471	1,574,977	53,324,697	114,193,129	0.98x	NM
Canyon-Johnson Urban II	2005	5/2005	40,000,000	35,954,815	15,898,610	133,119	4,045,186	0.45x	-10.4%
Capri Urban Investors	2008	6/2008	60,000,000	60,000,000	27,538,270	14,127,912	-	0.69x	-4.9%
Carlyle Realty Partners V, L.P.	2007	8/2007	20,000,000	25,849,528	33,549,331	3,668,605	4,420,459	1.44x	8.5%
Carlyle Realty Partners VI, L.P.	2011	9/2011	70,000,000	75,710,683	107,928,686	6,065,398	23,025,206	1.51x	20.4%
Carlyle Realty Partners VII, L.P.	2014	7/2014	80,000,000	72,791,840	66,681,222	33,516,992	53,619,954	1.38x	13.5%
DivcoWest Fund IV	2014	1/2014	23,000,000	22,770,380	34,820,289	3,106,314	2,067,545	1.67x	25.5%
DivcoWest Fund V	2016	12/2016	60,000,000	39,955,395	1,160,139	43,158,598	20,044,605	1.11x	5.8%
DivcoWest Fund VI	2020	3/2020	82,000,000	-	-	(444,483)	82,000,000	0.00x	NM
DRA Growth and Income Fund IX	2017	3/2017	49,000,000	49,382,000	13,767,657	44,174,015	6,482,863	1.17x	13.2%
DRA Growth and Income Fund X	2020	3/2020	59,000,000	9,113,947	-	9,638,844	49,886,053	1.06x	NM
Exeter Industrial Value Fund IV, L.P.	2016	9/2017	30,000,000	25,500,000	-	27,170,127	4,500,000	1.07x	4.6%
Exeter Industrial Value Fund V, L.P.	2020	N/A	49,000,000	-	-	-	49,000,000	0.00x	NM
GreenOak Asia III	2019	3/2020	87,000,000	-	-	(581,612)	87,000,000	0.00x	NM
Grosvenor Real Estate Emerging Manager SMA ¹	2019	N/A	236,000,000	-	-	-	236,000,000	0.00x	NM
H2 Special Opportunities Fund II ²	2011	2/2011	40,000,000	40,045,335	58,344,882	1,045,799	-	1.48x	13.4%
H2 Special Opportunities III ²	2014	12/2014	65,000,000	65,000,000	57,415,260	17,363,592	-	1.15x	5.7%
H2 Special Opportunities IV ²	2016	11/2016	91,000,000	59,157,806	740,287	34,492,326	32,542,061	0.60x	-63.0%
KKR Real Estate Partners Americas II	2018	2/2018	118,700,000	72,196,384	21,123,943	65,832,873	56,075,588	1.20x	20.4%
KKR Real Estate Partners Europe II	2020	N/A	83,250,000	-	-	-	83,250,000	0.00x	NM
Lone Star Real Estate Fund III, L.P. ²	2013	2/2014	100,000,000	95,639,471	118,107,588	9,723,255	6,258,452	1.34x	14.1%
Metropolitan Workforce Housing Fund ¹	2007	7/2007	14,000,000	14,013,027	16,744,531	262,023	-	1.21x	3.9%
NYC Asset Investor #1	2013	6/2013	50,000,000	57,079,931	27,497,874	39,960,103	14,258,486	1.18x	4.2%
NYC Asset Investor #3	2013	9/2013	50,000,000	32,949,424	5,788,910	39,698,068	17,050,577	1.38x	9.3%
NYCRS-KKR CMBS Retention Partners ²	2017	9/2017	122,000,000	109,061,014	17,476,505	100,393,829	13,189,225	1.08x	4.6%
Primerica Real Estate Capital VI ²	2016	4/2017	60,020,891	51,251,538	25,758,999	32,156,224	20,241,711	1.13x	12.2%
Primerica Real Estate Capital VII ²	2020	N/A	85,000,000	-	-	-	85,000,000	0.00x	NM
PRISA III	2008	9/2008	50,000,000	86,984,255	26,585,756	178,650,120	(0)	2.36x	11.8%
PW Real Estate Fund III	2016	10/2016	49,476,463	33,348,258	13,781,368	42,359,599	16,128,205	1.68x	27.5%
Silverpeak Legacy Partners III	2008	6/2008	50,000,000	23,542,869	4,469,259	2,982,966	-	0.32x	-12.3%
Stockbridge Real Estate III	2008	9/2008	27,000,000	26,998,145	16,829,753	14,723,831	1,855	1.17x	2.2%
Taconic New York City Investment Fund	2012	7/2012	70,000,000	29,272,728	47,515,256	4,762,846	40,727,272	1.79x	15.9%
The City Investment Fund I	2004	3/2004	225,000,000	221,883,300	224,384,800	357,714	-	1.01x	0.3%
Thor Property Fund II	2007	10/2008	40,000,000	54,796,108	54,781,253	10,398,381	2,971,106	1.19x	5.1%
Tristan European Property Investors Special Opp IV	2015	12/2015	49,501,227	41,453,899	5,339,413	42,227,586	10,134,090	1.15x	6.7%
Walton Street Real Estate Fund VI	2009	4/2009	50,000,000	44,323,933	50,723,633	15,670,036	6,478,575	1.50x	8.0%
Westbrook Real Estate Fund VII, L.P.	2007	12/2007	40,000,000	43,967,777	42,237,578	9,278,562	3,756,190	1.17x	2.7%
Westbrook Real Estate Fund VIII, L.P.	2009	12/2009	50,000,000	59,690,192	68,952,803	8,009,920	4,310,561	1.29x	10.5%
Westbrook Real Estate Fund X	2016	7/2016	36,000,000	31,040,465	15,711,534	19,987,098	10,870,936	1.15x	11.0%
Westbrook Real Estate Fund XI	2019	3/2020	83,000,000	-	-	(72,779)	83,000,000	0.00x	NM
Non-Core Portfolio	2004		4,066,907,261	2,803,249,370	2,403,651,088	1,326,705,697	1,667,287,155	1.33x	8.0%
Emerging Manager	2007		383,000,000	134,117,087	88,704,683	73,985,945	264,396,362	1.21x	5.9%
Debt	2011		707,020,891	480,583,396	285,600,519	253,130,156	247,057,017	1.12x	7.1%
Total Portfolio			6,216,247,218	5,003,255,951	3,300,298,499	3,688,485,416	1,996,378,212	1.40x	7.0%

¹ Emerging managers² Debt investments

NYCERS Monthly Real Estate Cash Flow Summary
(as of August 31, 2020)



New York City Employees' Retirement System
Infrastructure Portfolio
As of March 31, 2020

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	\$75,000,000	\$62,715,388	\$25,793,963	\$72,168,447	1.6x	11.5%
2014	IFM Global Infrastructure Fund	1/2/2014	\$75,000,000	\$100,136,579	\$37,106,368	\$108,673,478	1.5x	10.6%
2014	Global Energy & Power Infrastructure Fund II	4/16/2014	\$45,000,000	\$45,463,373	\$34,653,178	\$28,281,604	1.4x	25.9%
2014	KKR Global Infrastructure Investors II L.P.	6/12/2015	\$77,000,000	\$79,747,060	\$21,221,972	\$96,628,926	1.5x	16.1%
2016	Global Infrastructure Partners III-A/B, L.P.	1/29/2016	\$106,000,000	\$87,153,397	\$11,759,271	\$75,800,284	1.0x	0.2%
2016	Brookfield Infrastructure Fund III, L.P.	4/15/2016	\$91,000,000	\$54,978,553	\$11,687,231	\$51,992,412	1.2x	8.3%
2016	Actis Energy 4	12/16/2016	\$64,300,000	\$42,616,590	\$6,105,490	\$45,931,000	1.2x	13.2%
2017	EQT Infrastructure III (No.2) SCSp	2/18/2017	\$56,166,119	\$57,278,194	\$8,724,210	\$58,295,332	1.2x	11.3%
2017	ASF VII Infrastructure L.P.	4/24/2017	\$66,000,000	\$28,759,425	\$2,900,740	\$30,058,982	1.1x	15.3%
2017	Axiom Infrastructure North America	8/14/2017	\$67,104,915	\$68,242,994	\$7,862,042	\$65,228,004	1.1x	5.3%
2017	NYCRS EIG Energy Partners, L.P.	8/14/2017	\$65,880,000	\$18,491,222	\$2,373,451	\$17,391,631	1.1x	6.0%
2018	NYCRS EIG Energy Partners Co-Investment, L.P.	1/12/2018	\$16,470,000	-	-	-		0.0%
2018	KKR Global Infrastructure Investors III L.P.	3/29/2018	\$87,500,000	\$32,255,429	\$646,407	\$28,600,944	0.9x	-15.4%
2018	Global Energy & Power Infrastructure Fund III, L.P.	7/3/2018	\$87,500,000	\$19,509,227	\$1,111,464	\$15,772,490	NM	NM
2018	Cardinal NR Sidecar Holdings L.P.	10/5/2018	\$10,500,000	\$10,564,663	\$1,131,028	\$11,377,382	NM	NM
2019	EQT Infrastructure IV (No.2) USD SCSp	12/20/2018	\$101,500,000	\$48,025,483	\$2,401,746	\$43,089,007	NM	NM
2019	Ardian Infrastructure Fund V B	3/4/2019	\$73,678,863	\$14,503,879	\$361,657	\$13,475,853	NM	NM
2019	Global Infrastructure Partners IV-A/B, L.P.	3/11/2019	\$117,400,000	\$2,032,600	-	(\$9,684)	NM	NM
2019	Brookfield Infrastructure Fund IV, L.P.	5/10/2019	\$101,000,000	\$38,622,237	\$424,713	\$35,791,565	NM	NM
2019	EQT Infrastructure IV Co-Investment (Saber)	7/30/2019	\$8,400,000	\$8,464,615	-	\$8,400,000	NM	NM
2019	Brookfield Infrastructure Fund IV (BIF IV): Co-invest	10/25/2019	\$10,000,000	\$10,000,000	-	\$10,307,275	NM	NM
Total			\$1,402,399,896	\$829,560,907	\$176,264,931	\$817,254,932	1.2x	9.8%

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.

NYCERS Monthly Infrastructure Cash Flow Summary (as of August 31, 2020)

