



POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO

Q1 2023 PERFORMANCE REVIEW



CALENDAR YEAR INDEX PERFORMANCE

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Mar	YTD
S&P 500	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	31.5%	18.4%	28.7%	-18.1%	3.7%	7.5%
Russell 1000	33.1%	13.2%	0.9%	12.1%	21.7%	-4.8%	31.4%	21.0%	26.5%	-19.1%	3.2%	7.5%
Russell 2000	38.8%	4.9%	-4.4%	21.3%	14.6%	-11.0%	25.5%	20.0%	14.8%	-20.4%	-4.8%	2.7%
Russell 2500	36.8%	7.1%	-2.9%	17.6%	16.8%	-10.0%	27.8%	20.0%	18.2%	-18.4%	-3.7%	3.4%
MSCI EAFE	22.8%	-4.9%	-0.8%	1.0%	25.0%	-13.8%	22.0%	7.8%	11.3%	-14.5%	2.5%	8.5%
MSCI EM	-2.6%	-2.2%	-14.9%	11.2%	37.3%	-14.6%	18.4%	18.3%	-2.5%	-20.1%	3.0%	4.0%
MSCI ACWI	22.8%	4.2%	-2.4%	7.9%	24.0%	-9.4%	26.6%	16.3%	18.5%	-18.4%	3.1%	7.3%
Private Equity	12.6%	22.3%	14.6%	10.4%	10.3%	21.0%	13.1%	17.2%	45.0%	-9.7%	-	-9.7%
BBG TIPS	-8.6%	3.6%	-1.4%	4.7%	3.0%	-1.3%	8.4%	11.0%	6.0%	-11.8%	2.9%	3.3%
BBG Municipal	-2.6%	9.1%	3.3%	0.2%	5.4%	1.3%	7.5%	5.2%	1.5%	-8.5%	2.2%	2.8%
BBG Muni High Yield	-5.5%	13.8%	1.8%	3.0%	9.7%	4.8%	10.7%	4.9%	7.8%	-13.1%	1.6%	2.7%
BBG US Corporate HY	7.4%	2.5%	-4.5%	17.1%	7.5%	-2.1%	14.3%	7.1%	5.3%	-11.2%	1.1%	3.6%
BBG US Agg Bond	-2.0%	6.0%	0.5%	2.6%	3.5%	0.0%	8.7%	7.5%	-1.5%	-13.0%	2.5%	3.0%
BBG Global Agg	-2.6%	0.6%	-3.2%	2.1%	7.4%	-1.2%	6.8%	9.2%	-4.7%	-16.2%	3.2%	3.0%
BBG Long Treasuries	-12.7%	25.1%	-1.2%	1.3%	8.5%	-1.8%	14.8%	17.7%	-4.6%	-29.3%	4.7%	6.2%
BBG US Long Credit	-6.6%	16.4%	-4.6%	10.2%	12.2%	-6.8%	23.4%	13.3%	-1.2%	-25.3%	4.1%	5.4%
BBG US STRIPS 20+ Yr	-21.0%	46.4%	-3.7%	1.4%	13.7%	-4.1%	20.9%	24.0%	-5.2%	-39.6%	5.4%	8.3%
JPM GBI-EM Global Div	-9.0%	-5.7%	-14.9%	9.9%	15.2%	-6.2%	13.5%	2.7%	-8.7%	-11.7%	4.1%	5.2%
JPM EMBI Glob Div	-5.3%	7.4%	1.2%	10.2%	10.3%	-4.3%	15.0%	5.3%	-1.8%	-17.8%	1.0%	1.9%
CS Hedge Fund	9.7%	4.1%	-0.7%	1.2%	7.1%	-3.2%	9.3%	6.4%	8.2%	1.1%	-	0.9%
BBG Commodity	-9.5%	-17.0%	-24.7%	11.8%	1.7%	-11.2%	7.7%	-3.1%	27.1%	16.1%	-0.2%	-5.4%
Alerian Midstream	-	16.4%	-37.3%	33.8%	-2.4%	-13.3%	24.0%	-23.4%	38.4%	21.5%	-0.1%	0.8%
FTSE NAREIT Equity REITs	2.5%	30.1%	3.2%	8.5%	5.2%	-4.6%	26.0%	-8.0%	43.2%	-24.4%	-2.5%	2.7%

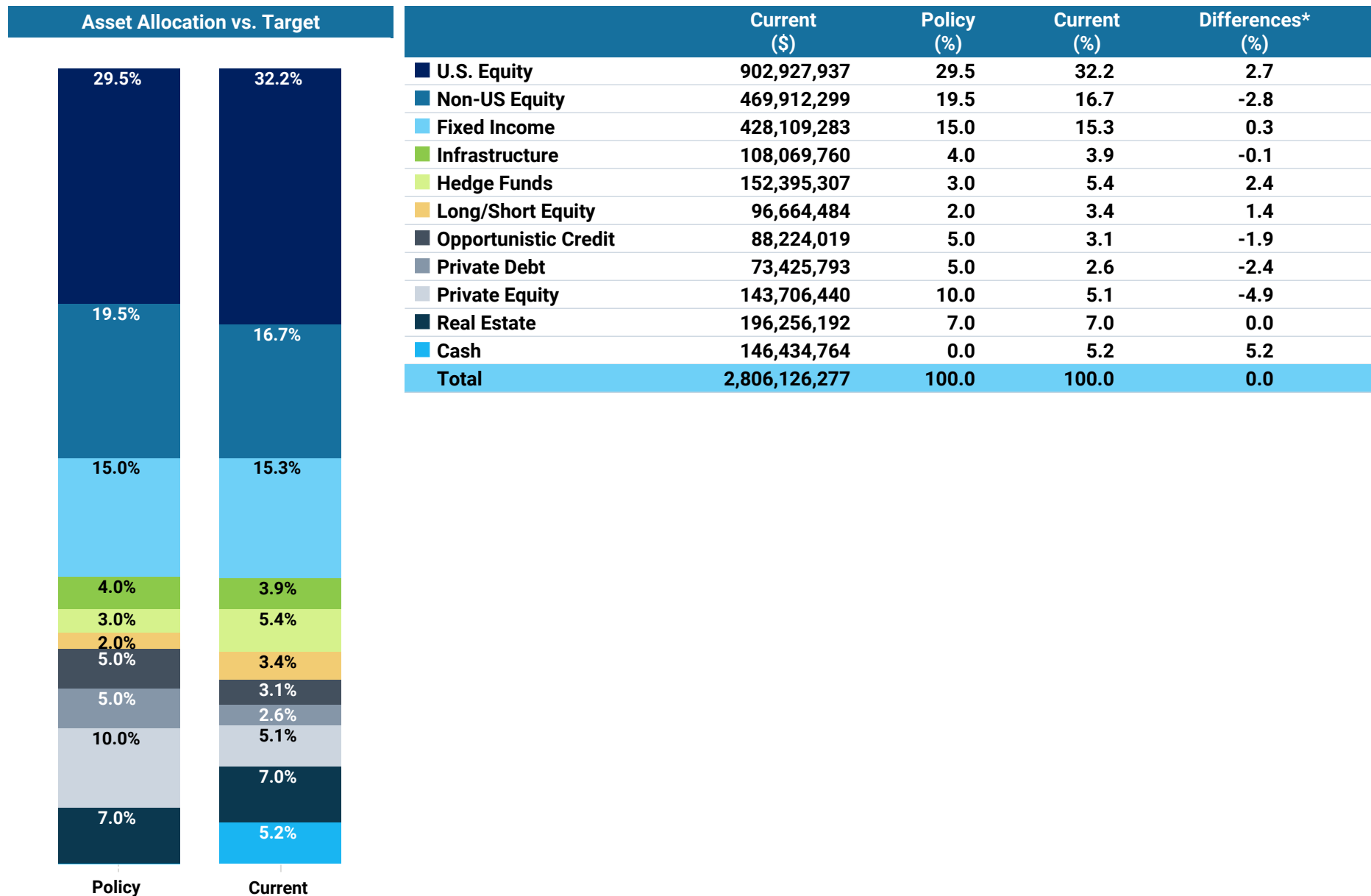
*Private Equity return represents calendar year pooled IRR and is subject to a one quarter lag
Source: FactSet, Barclays, Thomson One





TOTAL FUND PERFORMANCE

TOTAL ASSET ALLOCATION VS. POLICY TARGETS



*Difference between Policy and Current Allocation

INVESTMENT HIGHLIGHTS - NET

	Allocation		Performance (%)						
	Market Value (\$)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Composite	2,806,126,277	100.00	3.75	-4.29	10.55	5.43	6.53	8.26	Jan-84
Policy Index			3.80	-3.77	11.03	5.81	6.38		
Allocation Index			3.11	-4.04	8.76	4.06	5.68		
Total Equity	1,469,504,720	52.37	5.92	-7.67	14.96	5.38	7.89	6.87	Oct-96
MSCI AC World Index (Net)			7.31	-7.44	15.36	6.93	8.06	6.60	
Total Fixed Income	428,109,283	15.26	3.53	-3.16	-1.03	0.80	1.49	6.38	Jan-84
Blmbg. U.S. Aggregate Index			2.96	-4.78	-2.77	0.90	1.36	6.28	
Opportunistic Credit	88,224,019	3.14	3.10	-4.29	12.45	5.93		6.03	Nov-16
Opportunistic Credit Custom Index			3.41	-0.34	7.26	3.53		3.86	
Total Hedge Funds	152,395,307	5.43	1.54	-1.39	6.35	3.96		4.70	Aug-16
HFRI Fund of Funds Composite Index			0.70	-1.95	7.16	3.10		3.76	
Private Debt	73,425,793	2.62	0.00	3.23	8.10	6.83		6.42	Nov-16
Private Debt Custom Index			1.86	5.48	4.06	4.63		4.52	
Total Private Equity	143,706,440	5.12	0.00	2.59	44.87	28.95	17.91	11.44	Oct-95
CJA US All PE (1 Qtr Lag)			1.00	-1.33	18.48	15.94	14.77	14.83	
Total Infrastructure	108,069,760	3.85	0.00	2.15	8.11	6.53	15.23	8.36	Nov-07
NCREIF Property Index 1 Qtr. Lag			-3.50	5.52	8.06	7.46	8.82	6.82	
Total Real Estate	196,256,192	6.99	0.00	-0.99	12.12	8.83	7.24	6.23	Oct-95
NCREIF Property Index 1 Qtr. Lag			-3.50	5.52	8.06	7.46	8.82	9.22	
Cash	146,140,960	5.21	1.21	3.36	1.95	1.99	1.31	1.08	Jan-11
90 Day U.S. Treasury Bill			1.07	2.50	0.89	1.41	0.86	0.71	
Transitions	293,804	0.01	1.75	0.90	6.43	4.03		3.73	Jul-14

*Private Equity, Infrastructure, and Real Estate valuations are as of 12/31/2022.

*Opportunistic Credit Custom Index: 50% Bloomberg High Yield / 50% ICE BofA ML US HY BB-B Rated Constrained Index.

*Private Debt Custom Index: 30% CPI+3%/70% S&P/LSTA Leveraged Loan Index.

*Composite includes Cash and Transitions.

TOTAL PLAN NET PERFORMANCE DETAIL

	Allocation		Performance (%)							
	Market Value (\$)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Composite	2,806,126,277	100.0	3.7	-4.3	10.5	5.4	7.0	6.5	8.3	Jan-84
Policy Index			<u>3.8</u>	<u>-3.8</u>	<u>11.0</u>	<u>5.8</u>	<u>7.1</u>	<u>6.4</u>		
Over/Under			-0.1	-0.5	-0.5	-0.4	-0.1	0.1		
Allocation Index			<u>3.1</u>	<u>-4.0</u>	<u>8.8</u>	<u>4.1</u>	<u>5.8</u>	<u>5.7</u>		
Over/Under			0.6	-0.3	1.7	1.3	1.2	0.8		
Total Equity	1,469,504,720	52.4	5.9 (59)	-7.7 (62)	15.0 (53)	5.4 (68)	8.7 (55)	7.9 (54)	6.9 (83)	Oct-96
MSCI AC World Index (Net)			<u>7.3 (43)</u>	<u>-7.4 (61)</u>	<u>15.4 (48)</u>	<u>6.9 (49)</u>	<u>9.2 (47)</u>	<u>8.1 (52)</u>	<u>6.6 (87)</u>	
Over/Under			-1.4	-0.3	-0.4	-1.5	-0.5	-0.2	0.3	
eV All Global Equity Median			6.7	-6.4	15.1	6.9	8.9	8.1	7.8	
Total Domestic Equity	902,927,937	32.2	6.3 (38)	-9.1 (63)	18.1 (55)	7.9 (58)	10.2 (54)	10.3 (46)	10.5 (75)	Jan-84
Russell 3000 Index			<u>7.2 (30)</u>	<u>-8.6 (59)</u>	<u>18.5 (50)</u>	<u>10.5 (25)</u>	<u>12.0 (29)</u>	<u>11.7 (25)</u>	<u>10.9 (59)</u>	
Over/Under			-0.9	-0.5	-0.4	-2.6	-1.8	-1.4	-0.4	
eV All US Equity Median			4.6	-7.7	18.4	8.5	10.4	10.1	11.0	
Total Large Cap	691,659,075	24.6	6.7 (37)	-9.2 (72)	17.8 (47)	9.1 (58)	10.5 (60)	10.7 (55)	8.9 (69)	Oct-95
Russell 1000 Index			<u>7.5 (32)</u>	<u>-8.4 (65)</u>	<u>18.6 (37)</u>	<u>10.9 (29)</u>	<u>12.2 (31)</u>	<u>12.0 (29)</u>	<u>9.4 (46)</u>	
Over/Under			-0.8	-0.8	-0.8	-1.8	-1.7	-1.3	-0.5	
eV US Large Cap Equity Median			5.0	-6.8	17.5	9.5	11.0	11.0	9.3	
Xponance	581,093,688	20.7	7.5 (32)						15.6 (37)	Oct-22
Russell 1000 Index			<u>7.5 (32)</u>						<u>15.2 (42)</u>	
Over/Under			0.0						0.4	
eV US Large Cap Equity Median			5.0						14.5	
Great Lakes	110,565,387	3.9	3.1 (21)	-3.0 (23)	19.3 (45)	7.9 (57)	9.3 (60)	9.4 (55)	10.1 (20)	Jul-89
Russell 1000 Value Index			<u>1.0 (43)</u>	<u>-5.9 (66)</u>	<u>17.9 (63)</u>	<u>7.5 (65)</u>	<u>9.0 (66)</u>	<u>9.1 (65)</u>	<u>9.5 (71)</u>	
Over/Under			2.1	2.9	1.4	0.4	0.3	0.3	0.6	
eV US Large Cap Value Equity Median			0.6	-4.9	18.9	8.2	9.6	9.6	9.7	

*Policy Index effective 04/01/2021: 23.5% Russell 1000, 3% Russell 2500 Growth, 3% Russell 2500 Value, 7.5% MSCI Emerging Markets, 12% MSCI ACWI ex USA, 3% HFRI Equity Hedge (Total) Index, 13% Bloomberg US Aggregate TR, 2% Bloomberg US TIPS TR, 3% JP Morgan GBI - EM Global Diversified Index, 4% NCREIF Property Index (1 Qtr Lag), 7% Cambridge Associates US All PE (1 Qtr Lag), 7% NCREIF Property (1 Qtr Lag), 4% HFRI Fund of Funds Composite Index, 4% - 50/50 S&P/LSTA Leveraged Loan/Bloomberg High Yield, 4% - 30% CPI+3%/70% S&P/LSTA Leveraged Loan Index.

TOTAL PLAN NET PERFORMANCE DETAIL

	Allocation		Performance (%)							
	Market Value (\$)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total SMID Cap	149,638,350	5.3	6.3 (34)	-9.1 (63)	15.1 (85)	5.1 (83)	9.4 (61)	9.5 (51)	8.8 (72)	Nov-04
Russell 2500 Index			3.4 (60)	-10.4 (72)	19.4 (60)	6.6 (63)	9.5 (58)	9.1 (62)	8.8 (70)	
Over/Under			2.9	1.3	-4.3	-1.5	-0.1	0.4	0.0	
eV US Small-Mid Cap Equity Median			4.4	-7.1	20.4	7.5	10.0	9.5	9.6	
William Blair SMID Growth	75,971,549	2.7	5.6 (77)	-9.3 (30)	14.6 (71)	7.9 (55)	11.9 (43)	11.7 (28)	10.4 (37)	Nov-04
Russell 2500 Growth Index			6.5 (62)	-10.4 (42)	14.7 (67)	6.8 (70)	10.4 (72)	10.0 (70)	9.5 (70)	
Over/Under			-0.9	1.1	-0.1	1.1	1.5	1.7	0.9	
eV US Small-Mid Cap Growth Equity Median			7.1	-11.5	16.7	8.6	11.5	10.5	10.1	
Ariel Investment Small/Mid Cap Value	73,666,801	2.6	7.1 (7)	-8.8 (80)					-2.6 (81)	Apr-21
Russell 2500 Value Index			1.4 (73)	-10.5 (87)					-1.8 (74)	
Over/Under			5.7	1.7					-0.8	
eV US Small-Mid Cap Value Equity Median			2.5	-5.8					0.7	
Total Micro Cap	61,630,512	2.2	2.2 (51)	-7.8 (38)	26.9 (31)				5.8 (33)	Oct-18
eV US Micro Cap Equity Median			2.2	-8.8	23.8				4.3	
BMO Micro Cap Equity	61,630,512	2.2	2.2 (51)	-7.8 (38)	26.9 (31)				5.8 (33)	Oct-18
Russell Microcap Index			-2.8 (88)	-17.9 (93)	17.2 (93)				1.0 (89)	
Over/Under			5.0	10.1	9.7				4.8	
eV US Micro Cap Equity Median			2.2	-8.8	23.8				4.3	

TOTAL PLAN NET PERFORMANCE DETAIL

	Allocation		Performance (%)							
	Market Value (\$)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total International Equity	469,912,299	16.7	6.5 (73)	-6.3 (64)	13.0 (49)	2.8 (53)	7.0 (37)	5.6 (40)	8.3	Jan-84
MSCI AC World ex USA (Net)			<u>6.9</u> (67)	<u>-5.1</u> (55)	<u>11.8</u> (67)	<u>2.5</u> (62)	<u>5.9</u> (67)	<u>4.2</u> (85)		
Over/Under			-0.4	-1.2	1.2	0.3	1.1	1.4		
eV All ACWI ex-US Equity Median			7.8	-4.6	12.9	3.0	6.4	5.3		
Total Developed Int'l Equity	319,581,291	11.4	6.7 (69)	-5.8 (62)	13.6 (41)	3.9 (31)	7.3 (31)	6.1 (27)	6.1 (25)	Jan-11
MSCI AC World ex USA (Net)			<u>6.9</u> (67)	<u>-5.1</u> (55)	<u>11.8</u> (67)	<u>2.5</u> (62)	<u>5.9</u> (67)	<u>4.2</u> (85)	<u>3.7</u> (87)	
Over/Under			-0.2	-0.7	1.8	1.4	1.4	1.9	2.4	
eV All ACWI ex-US Equity Median			7.8	-4.6	12.9	3.0	6.4	5.3	5.0	
Artisan Partner	71,311,003	2.5	8.5 (38)	0.3 (13)	9.4 (86)	3.6 (37)	5.8 (70)	5.1 (61)	6.0 (43)	Apr-05
MSCI AC World ex USA (Net)			<u>6.9</u> (67)	<u>-5.1</u> (55)	<u>11.8</u> (67)	<u>2.5</u> (62)	<u>5.9</u> (67)	<u>4.2</u> (85)	<u>4.7</u> (78)	
Over/Under			1.6	5.4	-2.4	1.1	-0.1	0.9	1.3	
eV All ACWI ex-US Equity Median			7.8	-4.6	12.9	3.0	6.4	5.3	5.7	
William Blair International Growth	67,772,854	2.4	8.6 (35)	-9.5 (91)	12.0 (67)	4.1 (26)	6.9 (27)	5.7 (36)	5.6 (41)	Apr-05
MSCI EAFE (Net)			<u>8.5</u> (41)	<u>-1.4</u> (41)	<u>13.0</u> (57)	<u>3.5</u> (40)	<u>6.2</u> (45)	<u>5.0</u> (64)	<u>4.7</u> (72)	
Over/Under			0.1	-8.1	-1.0	0.6	0.7	0.7	0.9	
eV All EAFE Equity Median			8.0	-2.4	13.3	3.1	6.0	5.3	5.1	
UBS International	88,619,338	3.2	5.2 (87)	-5.3 (59)	12.9 (50)	2.6 (58)	6.9 (38)	4.9 (64)	9.2	Jan-84
MSCI AC World ex USA (Net)			<u>6.9</u> (67)	<u>-5.1</u> (55)	<u>11.8</u> (67)	<u>2.5</u> (62)	<u>5.9</u> (67)	<u>4.2</u> (85)		
Over/Under			-1.7	-0.2	1.1	0.1	1.0	0.7		
eV All ACWI ex-US Equity Median			7.8	-4.6	12.9	3.0	6.4	5.3		
Acadian	91,863,632	3.3	5.5 (64)	-7.8 (57)	18.0 (19)	3.9 (5)	9.0 (2)		7.7 (1)	Jan-14
MSCI EAFE Small Cap (Net)			<u>4.9</u> (75)	<u>-9.8</u> (74)	<u>12.1</u> (59)	<u>0.9</u> (58)	<u>5.3</u> (58)		<u>4.3</u> (51)	
Over/Under			0.6	2.0	5.9	3.0	3.7		3.4	
eV EAFE Small Cap Equity Median			6.0	-7.4	13.2	1.3	5.5		4.4	

TOTAL PLAN NET PERFORMANCE DETAIL

	Allocation		Performance (%)							
	Market Value (\$)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Emerging Markets Equity	150,331,007	5.4	6.1 (24)	-7.2 (33)	11.6 (27)	0.1 (40)	6.3 (27)		4.0 (17)	Jan-14
MSCI Emerging Markets (Net)			<u>4.0</u> (68)	<u>-10.7</u> (67)	<u>7.8</u> (63)	<u>-0.9</u> (64)	<u>4.9</u> (64)		<u>2.3</u> (65)	
Over/Under			2.1	3.5	3.8	1.0	1.4		1.7	
eV Emg Mkts All Cap Equity Median			4.8	-9.0	9.1	-0.2	5.5		2.9	
Earnest Partners Emerging Markets Equity	74,355,181	2.6	4.5 (56)	-5.7 (23)	14.6 (13)	1.7 (19)	6.8 (19)		4.4 (12)	Dec-13
MSCI Emerging Markets (Net)			<u>4.0</u> (68)	<u>-10.7</u> (67)	<u>7.8</u> (63)	<u>-0.9</u> (64)	<u>4.9</u> (64)		<u>2.1</u> (70)	
Over/Under			0.5	5.0	6.8	2.6	1.9		2.3	
eV Emg Mkts All Cap Equity Median			4.8	-9.0	9.1	-0.2	5.5		2.7	
Lazard	75,975,827	2.7	7.7 (10)	-8.6 (47)	8.8 (54)	-1.3 (70)	5.9 (38)		3.7 (21)	Dec-13
MSCI Emerging Markets (Net)			<u>4.0</u> (68)	<u>-10.7</u> (67)	<u>7.8</u> (63)	<u>-0.9</u> (64)	<u>4.9</u> (64)		<u>2.1</u> (70)	
Over/Under			3.7	2.1	1.0	-0.4	1.0		1.6	
eV Emg Mkts All Cap Equity Median			4.8	-9.0	9.1	-0.2	5.5		2.7	
Long/Short Equities	96,664,484	3.4	-0.6 (73)	-0.7 (38)	4.1 (76)	3.9 (55)			3.8 (55)	Mar-18
Long/Short Custom Index			<u>1.1</u> (61)	<u>2.6</u> (25)	<u>1.0</u> (89)	<u>1.4</u> (73)			<u>1.4</u> (73)	
Over/Under			-1.7	-3.3	3.1	2.5			2.4	
eV Alt Fundamental - Long/Short Equity Median			2.3	-4.2	10.7	4.5			4.3	
UBS Bucktown CPD LLC	59,978,000	2.1	1.0 (62)	-0.2 (37)	3.3 (79)	3.7 (58)			3.7 (58)	Apr-18
Long/Short Custom Index			<u>1.1</u> (61)	<u>2.6</u> (25)	<u>1.0</u> (89)	<u>1.4</u> (73)			<u>1.4</u> (73)	
Over/Under			-0.1	-2.8	2.3	2.3			2.3	
eV Alt Fundamental - Long/Short Equity Median			2.3	-4.2	10.7	4.5			4.5	
Pluscios L/S EQ FD	36,686,484	1.3	-1.0 (75)	0.7 (33)	5.4 (72)	4.1 (54)			4.0 (49)	Feb-18
Long/Short Custom Index			<u>1.1</u> (61)	<u>2.6</u> (25)	<u>1.0</u> (89)	<u>1.4</u> (73)			<u>1.4</u> (70)	
Over/Under			-2.1	-1.9	4.4	2.7			2.6	
eV Alt Fundamental - Long/Short Equity Median			2.3	-4.2	10.7	4.5			3.9	

*Long/Short Custom Index: 100% FTSE T-Bill 3 Months TR.

TOTAL PLAN NET PERFORMANCE DETAIL

	Allocation		Performance (%)								Inception Date
	Market Value (\$)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	Inception (%)		
Total Fixed Income	428,109,283	15.3	3.5 (19)	-3.2 (55)	-1.0 (72)	0.8 (89)	1.3 (63)	1.5 (62)	6.4 (33)	Jan-84	
Blmbg. U.S. Aggregate Index			3.0 (41)	-4.8 (70)	-2.8 (91)	0.9 (86)	0.9 (86)	1.4 (69)	6.3 (42)		
Over/Under			0.5	1.6	1.8	-0.1	0.4	0.1	0.1		
eV All US Fixed Inc Median			2.7	-2.6	0.2	1.5	1.6	1.8	6.1		
Core/Core Plus Fixed Income	357,938,428	12.8	3.4 (12)	-4.0 (19)	-1.0 (15)	1.4 (20)	1.5 (15)	1.8 (19)	2.7 (14)	Dec-10	
Blmbg. U.S. Aggregate Index			3.0 (64)	-4.8 (50)	-2.8 (90)	0.9 (75)	0.9 (80)	1.4 (74)	2.0 (82)		
Over/Under			0.4	0.8	1.8	0.5	0.6	0.4	0.7		
eV US Core Fixed Inc Median			3.1	-4.8	-1.9	1.1	1.2	1.6	2.2		
Wellington	88,162,774	3.1	3.3 (15)	-4.5 (32)	-0.8 (11)	1.6 (10)	2.0 (3)	2.0 (7)	4.0 (6)	Dec-04	
Blmbg. U.S. Aggregate Index			3.0 (64)	-4.8 (50)	-2.8 (90)	0.9 (75)	0.9 (80)	1.4 (74)	3.1 (75)		
Over/Under			0.3	0.3	2.0	0.7	1.1	0.6	0.9		
eV US Core Fixed Inc Median			3.1	-4.8	-1.9	1.1	1.2	1.6	3.3		
Earnest Partners Core Fixed Income	86,900,532	3.1	2.9 (74)	-4.4 (29)	-2.0 (57)				-1.3 (69)	Oct-19	
Blmbg. U.S. Aggregate Index			3.0 (64)	-4.8 (50)	-2.8 (90)				-1.5 (80)		
Over/Under			-0.1	0.4	0.8				0.2		
eV US Core Fixed Inc Median			3.1	-4.8	-1.9				-1.1		
Garcia Hamilton	90,345,004	3.2	4.1 (2)	-3.3 (10)	-1.3 (21)				-0.7 (18)	Oct-19	
Blmbg. U.S. Aggregate Index			3.0 (64)	-4.8 (50)	-2.8 (90)				-1.5 (80)		
Over/Under			1.1	1.5	1.5				0.8		
eV US Core Fixed Inc Median			3.1	-4.8	-1.9				-1.1		
National Investment Services	92,530,117	3.3	3.2 (25)	-3.9 (17)	0.1 (1)				-0.3 (6)	Oct-19	
Blmbg. U.S. Aggregate Index			3.0 (64)	-4.8 (50)	-2.8 (90)				-1.5 (80)		
Over/Under			0.2	0.9	2.9				1.2		
eV US Core Fixed Inc Median			3.1	-4.8	-1.9				-1.1		
Global Multi Sector Fixed Income	20,535,680	0.7	3.5 (20)	-2.7 (51)	2.0 (57)	1.8 (36)	2.0 (66)		2.0 (50)	Jun-15	
Blmbg. Global Aggregate			3.0 (22)	-8.1 (91)	-3.4 (100)	-1.3 (85)	-0.3 (93)		0.4 (86)		
Over/Under			0.5	5.4	5.4	3.1	2.3		1.6		
eV Global Unconstrained Fixed Inc Median			2.0	-2.6	2.3	1.4	2.5		1.9		
Manulife Asset Management	20,535,680	0.7	3.5 (20)	-2.7 (51)	2.0 (57)	1.8 (36)	2.0 (66)		2.0 (50)	Jun-15	
Blmbg. Global Aggregate			3.0 (22)	-8.1 (91)	-3.4 (100)	-1.3 (85)	-0.3 (93)		0.4 (86)		
Over/Under			0.5	5.4	5.4	3.1	2.3		1.6		
eV Global Unconstrained Fixed Inc Median			2.0	-2.6	2.3	1.4	2.5		1.9		

TOTAL PLAN NET PERFORMANCE DETAIL

	Allocation		Performance (%)							
	Market Value (\$)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Short Duration	35,008	0.0	1.8 (99)	3.1 (1)	1.3 (1)	1.8 (5)			1.7 (10)	Jan-17
Blmbg. 1-3 Year Gov/Credit index			<u>1.5</u> (100)	<u>0.3</u> (1)	<u>-0.4</u> (4)	<u>1.3</u> (35)			<u>1.1</u> (71)	
Over/Under			0.3	2.8	1.7	0.5			0.6	
eV US Core Fixed Inc Median			3.1	-4.8	-1.9	1.1			1.3	
HGK Asset Management	35,008	0.0	1.8 (28)	3.1 (1)	1.3 (24)	1.8 (12)			2.2 (4)	Nov-16
Blmbg. 1-3 Year Gov/Credit index			<u>1.5</u> (60)	<u>0.3</u> (42)	<u>-0.4</u> (75)	<u>1.3</u> (64)			<u>1.0</u> (69)	
Over/Under			0.3	2.8	1.7	0.5			1.2	
eV US Short Duration Fixed Inc Median			1.6	0.2	0.3	1.4			1.2	
Emerging Market Debt	49,600,167	1.8	4.6 (16)	3.6 (2)	2.0 (52)				0.4 (30)	Mar-19
JP Morgan GBI - EM Global Diversified Index			<u>5.2</u> (12)	<u>-0.7</u> (20)	<u>0.9</u> (77)				<u>-1.3</u> (75)	
Over/Under			-0.6	4.3	1.1				1.7	
eV All Emg Mkts Fixed Inc Median			2.3	-3.9	2.1				-0.4	
Lazard EM Income Fund L	25,559,282	0.9	4.0 (21)	3.7 (2)	0.8 (77)				1.1 (21)	Feb-19
JP Morgan GBI - EM Global Diversified Index			<u>5.2</u> (12)	<u>-0.7</u> (20)	<u>0.9</u> (77)				<u>-1.6</u> (80)	
Over/Under			-1.2	4.4	-0.1				2.7	
eV All Emg Mkts Fixed Inc Median			2.3	-3.9	2.1				-0.3	
Blackrock EM Local Curr	24,040,885	0.9	5.4 (11)	3.5 (2)	3.5 (20)				-1.0 (36)	Jul-19
JP Morgan GBI - EM Global Diversified Index			<u>5.2</u> (12)	<u>-0.7</u> (20)	<u>0.9</u> (77)				<u>-2.5</u> (73)	
Over/Under			0.2	4.2	2.6				1.5	
eV All Emg Mkts Fixed Inc Median			2.3	-3.9	2.1				-1.6	
Cash	146,140,960	5.2	1.2	3.4	1.9	2.0	1.7	1.3	1.1	Jan-11
90 Day U.S. Treasury Bill			<u>1.1</u>	<u>2.5</u>	<u>0.9</u>	<u>1.4</u>	<u>1.2</u>	<u>0.9</u>	<u>0.7</u>	
Over/Under			0.1	0.9	1.0	0.6	0.5	0.4	0.4	
Cash	145,386,357	5.2	1.2 (8)	3.6 (1)	2.1 (2)	2.1 (1)	1.8 (2)	1.4 (6)	2.4 (4)	Sep-98
90 Day U.S. Treasury Bill			<u>1.1</u> (69)	<u>2.5</u> (57)	<u>0.9</u> (60)	<u>1.4</u> (40)	<u>1.2</u> (49)	<u>0.9</u> (57)	<u>1.8</u> (62)	
Over/Under			0.1	1.1	1.2	0.7	0.6	0.5	0.6	
eV US Cash Management Median			1.1	2.6	0.9	1.3	1.2	0.9	1.9	
Benefit Payments Account	754,603	0.0	1.2	2.9	1.1				1.1	Apr-20
90 Day U.S. Treasury Bill			<u>1.1</u>	<u>2.5</u>	<u>0.9</u>				<u>0.9</u>	
Over/Under			0.1	0.4	0.2				0.2	

TOTAL PLAN NET PERFORMANCE DETAIL

	Allocation		Performance (%)							
	Market Value (\$)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Transitions	293,804	0.0	1.7	0.9	6.4	4.0	5.4		3.7	Jul-14
Tax Reclaims	293,804	0.0	1.7	0.9	6.4	4.0	5.4		3.7	Jul-14
Opportunistic Credit	88,224,019	3.1	3.1	-4.3	12.4	5.9			6.0	Nov-16
Opportunistic Credit Custom Index			<u>3.4</u>	<u>-0.3</u>	<u>7.3</u>	<u>3.5</u>			<u>3.9</u>	
Over/Under			-0.3	-4.0	5.1	2.4			2.1	
Total Hedge Funds	152,395,307	5.4	1.5 (32)	-1.4 (57)	6.3 (70)	4.0 (60)			4.7 (54)	Aug-16
HFRI Fund of Funds Composite Index			<u>0.7 (49)</u>	<u>-1.9 (59)</u>	<u>7.2 (65)</u>	<u>3.1 (69)</u>			<u>3.8 (71)</u>	
Over/Under			0.8	0.5	-0.9	0.9			0.9	
eV Alt Fund of Funds - Multi-Strategy Median			0.6	0.1	8.1	4.5			4.9	
Pluscios	76,868,038	2.7	2.1 (27)	0.9 (45)	6.9 (66)	4.4 (53)			5.2 (50)	Jul-16
HFRI Fund of Funds Composite Index			<u>0.7 (49)</u>	<u>-1.9 (59)</u>	<u>7.2 (65)</u>	<u>3.1 (69)</u>			<u>3.9 (72)</u>	
Over/Under			1.4	2.8	-0.3	1.3			1.3	
eV Alt Fund of Funds - Multi-Strategy Median			0.6	0.1	8.1	4.5			5.2	
EnTrust Permal	42,691,783	1.5	1.7 (31)	-6.4 (78)	0.2 (100)	1.0 (85)			1.9 (92)	Jan-17
HFRI Fund of Funds Composite Index			<u>0.7 (49)</u>	<u>-1.9 (59)</u>	<u>7.2 (65)</u>	<u>3.1 (69)</u>			<u>3.7 (72)</u>	
Over/Under			1.0	-4.5	-7.0	-2.1			-1.8	
eV Alt Fund of Funds - Multi-Strategy Median			0.6	0.1	8.1	4.5			5.0	
Blueprint Capital Advisors	32,835,486	1.2	0.0 (64)	0.4 (48)	15.0 (12)	7.6 (22)			7.0 (28)	Aug-17
Blueprint Capital Custom Index			<u>0.7 (49)</u>	<u>-1.9 (59)</u>	<u>7.2 (65)</u>	<u>3.1 (69)</u>			<u>3.4 (67)</u>	
Over/Under			-0.7	2.3	7.8	4.5			3.6	
eV Alt Fund of Funds - Multi-Strategy Median			0.6	0.1	8.1	4.5			4.6	
Private Debt	73,425,793	2.6								
Total Private Equity	143,706,440	5.1								
Total Infrastructure	108,069,760	3.9								
Total Real Estate	196,256,192	7.0								

*Opportunistic Credit Custom Index: 50% Bloomberg High Yield / 50% ICE BofA ML US HY BB-B Rated Constrained Index

*Private Debt Custom Index: 3 - Month LIBOR + 3%



PRIVATE CREDIT Q4 2023 QUARTERLY REVIEW

Chicago Policemen's Annuity and Benefit Fund

RETURN SUMMARY

Investments			Trailing Period Returns (IRR) %						
Investment Name	Vintage Year	Commitment	(Qtr)	(YTD)	(1 Yr)	(3 Yrs)	(5 Yrs)	(10 Yrs)	SI IRR
Private Debt									
Beach Point Select Fund, L.P.	2016	\$20,000,000	1.65%	-6.89%	-6.89%	11.47%	9.54%		9.61%
Blueprint CAP I, L.P.	2017	\$53,000,000	0.37%	0.41%	0.41%	9.78%	7.07%		7.05%
Brightwood Capital Fund V, L.P.	2021	\$20,000,000	1.64%						12.60%
Clareant EDL (Levered) II USD Feeder SCSp	2016	\$20,000,000	-0.06%	1.24%	1.24%	1.58%	5.87%		7.01%
Clareant EDL (Levered) III USD Feeder SCSp	2018	\$10,000,000	1.19%	10.59%	10.59%	11.08%			11.20%
Crestline Opportunity Fund III (Cayman), Ltd.	2017	\$20,000,000	-0.15%	2.13%	2.13%	8.80%	10.78%		9.85%
Dorchester Capital Secondaries Offshore IV, L.P.	2017	\$25,000,000	6.38%	3.60%	3.60%	-1.80%	5.40%		5.11%
Eagle Point Credit US, L.P.	2018	\$35,000,000	0.14%	-10.25%	-10.25%	6.49%			3.70%
JP Morgan Lynstone Special Situations Fund	2021	\$20,000,000	0.33%						-5.00%
Monroe Capital Private Credit Fund II, L.P.	2016	\$20,000,000	1.13%	-1.33%	-1.33%	8.84%	7.48%		9.50%
Monroe Capital Private Credit Fund III, L.P.	2018	\$10,000,000	3.89%	9.65%	9.65%	11.65%			12.38%
Monroe Capital Private Credit Fund IV, L.P.	2021	\$20,000,000	2.30%	10.06%	10.06%				10.15%
Voya Credit Opportunities Fund	2016	\$10,000,000	1.46%	-8.30%	-8.30%	-0.95%	1.40%		2.16%
Voya Mortgage Investment Fund	2018	\$10,000,000	2.15%	-2.51%	-2.51%	0.91%			2.62%
Total		\$293,000,000	1.25%	-1.66%	-1.66%	6.92%	6.85%		7.01%





REAL ASSETS

Q4 2023

QUARTERLY REVIEW

Chicago Policemen's Annuity and Benefit Fund

RETURN SUMMARY

Investments			Trailing Period Returns (IRR) %						
Investment Name	Vintage Year	Commitment	(Qtr)	(YTD)	(1 Yr)	(3 Yrs)	(5 Yrs)	(10 Yrs)	SI IRR
Real Assets									
Carlyle Infrastructure Partners, L.P.	2007	\$25,000,000	-7.68%	-7.68%	-7.68%	-10.75%	-8.21%	8.73%	2.70%
Global Infrastructure Partners III, L.P.	2016	\$25,000,000	4.55%	11.58%	11.58%	13.42%	12.32%		11.01%
Global Infrastructure Partners IV, L.P.	2019	\$25,000,000	1.25%	9.91%	9.91%	3.54%			3.49%
Global Infrastructure Partners, L.P.	2007	\$35,000,000	-11.17%	-18.42%	-18.42%	-10.14%	17.67%	28.00%	14.78%
Ullico Infrastructure Taxable Fund, L.P.	2018	\$62,000,000	0.71%	3.48%	3.48%	3.92%			5.26%
Total		\$172,000,000	1.69%	6.53%	6.53%	6.46%	8.01%	13.76%	9.64%





PRIVATE EQUITY Q4 2023 QUARTERLY REVIEW

Chicago Policemen's Annuity and Benefit Fund

RETURN SUMMARY

Investments			Trailing Period Returns (IRR) %						
Investment Name	Vintage Year	Commitment	(Qtr)	(YTD)	(1 Yr)	(3 Yrs)	(5 Yrs)	(10 Yrs)	SI IRR
Private Equity									
Adams Street Co-Investment V, L.P.	2021	\$25,000,000	21.30%						18.65%
Dover Street X, L.P.	2020	\$25,000,000	0.00%	7.34%	7.34%				42.90%
Glendower Capital Secondary Opportunities Fund V, SCSp	2021	\$25,000,000	-3.99%	1.44%	1.44%				123.14%
Invesco Venture Alpha Fund, L.P.	2017	\$25,000,000	0.00%	18.83%	18.83%	51.43%	35.72%		35.10%
Mesirow Financial Private Equity Fund VIII-B, L.P.	2021	\$25,000,000	0.96%						-1.74%
Total		\$125,000,000	0.10%	13.79%	13.79%	48.40%	35.64%		35.09%





REAL ASSETS

Q4 2023

QUARTERLY REVIEW

Chicago Policemen's Annuity and Benefit Fund

RETURN SUMMARY

Investments			Trailing Period Returns (IRR) %						
Investment Name	Vintage Year	Commitment	(Qtr)	(YTD)	(1 Yr)	(3 Yrs)	(5 Yrs)	(10 Yrs)	SI IRR
Real Estate									
Ares European Real Estate Fund III, L.P.	2007	\$10,000,000	-13.17%	-25.81%	-25.81%	-11.91%	-26.79%	6.07%	2.59%
Blackstone Property Partners, L.P.	2019	\$30,000,000	-6.79%	9.34%	9.34%	6.29%			6.67%
Brookfield Real Estate Finance Fund V, L.P.	2017	\$10,000,000	2.06%	5.83%	5.83%	7.05%	7.47%		7.59%
DRA Growth and Income Fund VI, L.P.	2007	\$3,236,474	0.00%	0.00%	0.00%	-16.04%	-3.82%	21.77%	10.38%
Lone Star Fund VI (U.S.), L.P.	2008	\$10,000,000	6.31%	0.05%	0.05%	19.11%	10.59%	4.02%	11.59%
Lone Star Fund X (U.S.), L.P.	2017	\$15,000,000	6.81%	18.11%	18.11%	24.60%	20.43%		18.97%
Lone Star Fund XI, L.P.	2019	\$15,000,000	2.84%	14.07%	14.07%	50.53%			41.22%
Lone Star Real Estate Fund (U.S.), L.P.	2008	\$5,000,000	9.06%	-4.22%	-4.22%	8.18%	-7.89%	2.33%	4.48%
Mesirow Financial Real Estate Value Fund III, L.P.	2018	\$10,000,000	0.60%	3.94%	3.94%	18.23%			15.59%
Prime Property Fund, LLC	2006	\$15,213,904	-3.75%	6.32%	6.32%	8.25%	7.76%	10.24%	6.45%
Sound Mark Horizons Fund, L.P.	2017	\$25,000,000	-2.81%	-1.92%	-1.92%	1.40%	3.92%		3.95%
TA Associates Realty XII, L.P.	2020	\$40,000,000	-3.18%	8.93%	8.93%				26.27%
TerraCap Partners IV (Institutional), L.P.	2019	\$15,000,000	2.91%	5.92%	5.92%	4.36%			10.52%
Trumbull Property Fund, L.P.	2006	\$15,885,010	-5.64%	-4.28%	-4.28%	-2.29%	-1.96%	3.62%	2.71%
Total		\$219,335,388	-2.52%	6.78%	6.78%	7.22%	7.15%	7.31%	5.04%

