



Q2 2020 PERFORMANCE REPORT

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO

August 27, 2020

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BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

Chicago Policemen's Annuity and Benefit Fund

INVESTMENT HIGHLIGHTS - NET

	Market Value (\$)	% of Portfolio	Policy %	Ending June 30, 2020						Inception (%)	Inception Date
				3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)		
Composite	2,407,723,144	100.0	100.0	8.9	-4.4	0.8	4.2	5.0	7.6	8.3	Jan-84
<i>Policy Index</i>				11.3	-4.3	0.8	4.9	5.2	7.3	--	Jan-84
<i>Allocation Index</i>				10.1	-5.0	-0.3	3.8	4.6	7.5	--	Jan-84
Total Equity	1,213,297,795	50.4	45.0	19.0	-8.3	-0.8	4.8	5.9	9.7	6.6	Oct-96
<i>MSCI ACWI</i>				19.2	-6.3	2.1	6.1	6.5	9.2	6.3	Oct-96
Total Fixed Income	537,343,464	22.3	22.0	3.3	3.1	5.0	3.7	3.6	3.8	7.1	Jan-84
<i>BBgBarc US Aggregate TR</i>				2.9	6.1	8.7	5.3	4.3	3.8	7.1	Jan-84
Total Private Equity	26,472,782	1.1	5.0	1.3	1.4	6.9	1.3	3.2	8.9	7.8	Oct-95
<i>CJA US All PE</i>				0.0	-10.1	-5.5	7.4	8.3	11.9	13.5	Oct-95
Total Infrastructure	71,461,506	3.0	4.0	-6.9	-6.9	1.8	14.9	18.2	15.0	8.3	Nov-07
<i>NCREIF Property Index</i>				-1.0	-0.3	2.7	5.4	6.8	9.7	6.1	Nov-07
Total Real Estate	134,311,160	5.6	7.0	-1.0	1.5	5.4	4.7	4.9	7.2	5.6	Oct-95
<i>NCREIF Property Index 1 Qtr. Lag</i>				0.7	2.3	5.3	6.4	7.6	10.2	9.3	Oct-95
Total Hedge Funds	157,421,410	6.5	4.0	-2.0	-1.6	0.0	2.2	--	--	3.1	Aug-16
<i>HFRI Fund of Funds Composite Index</i>				7.9	-1.6	0.5	2.3	1.5	2.8	3.0	Aug-16
Total Global Asset Allocation	108,059,355	4.5	5.0	12.3	-5.8	-2.3	2.0	2.9	--	4.2	Dec-11
<i>60% MSCI ACWI (Net) / 40% FTSE WGBI</i>				12.2	-1.8	3.7	5.6	5.6	6.6	6.1	Dec-11
Opportunistic Credit	61,589,884	2.6	4.0	-2.5	-4.3	-4.5	1.7	--	--	2.8	Nov-16
<i>Opportunistic Credit Custom Index</i>				9.9	-4.2	-1.0	2.8	--	--	3.6	Nov-16
Private Debt	81,403,108	3.4	4.0	-8.2	-6.6	-2.5	4.9	--	--	4.8	Nov-16
<i>Private Debt Custom Index</i>				0.8	2.0	4.6	5.0	--	--	4.9	Nov-16

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

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



Chicago Policemen's Annuity and Benefit Fund

TOTAL PLAN PERFORMANCE SUMMARY

	Market Value	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank
Composite	\$2,407,723,144	8.91%	93	-4.41%	83	0.81%	87	4.20%	92	5.00%	84
Policy Index		11.30%	78	-4.34%	83	0.83%	87	4.95%	78	5.19%	80
Allocation Index		10.12%	88	-4.99%	89	-0.30%	95	3.83%	95	4.63%	93
InvMetrics Public DB Net Median		13.16%		-2.56%		3.57%		6.00%		5.93%	

3 Years Ending June 30, 2020

	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Composite	4.20%	92	8.83%	13	0.29	86	0.30	75
Allocation Index	3.83%	95	9.54%	23	0.23	93	0.23	91
Policy Index	4.95%	78	9.46%	22	0.35	72	0.33	77

5 Years Ending June 30, 2020

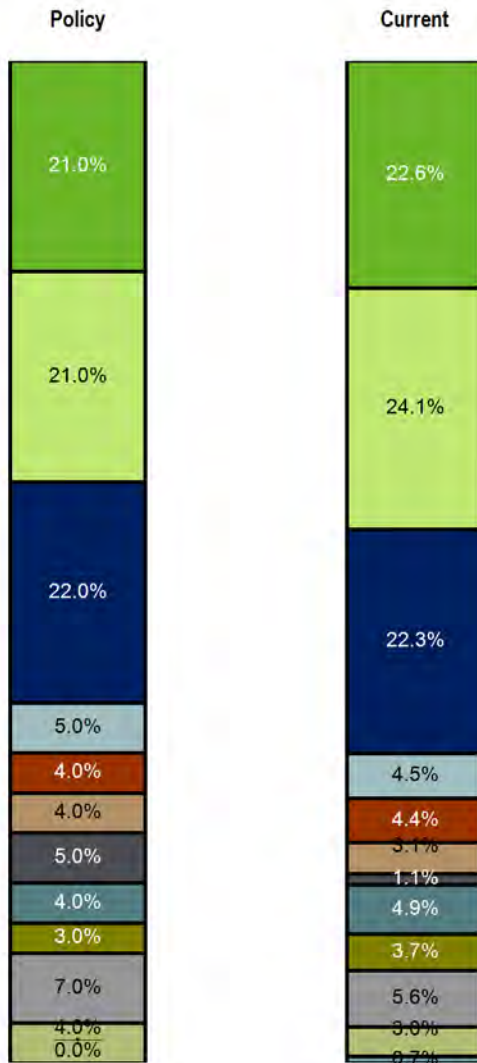
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio	Rank
Composite	5.00%	84	8.02%	16	0.48	68	0.69	55
Allocation Index	4.63%	93	8.36%	22	0.42	86	0.59	82
Policy Index	5.19%	80	8.32%	22	0.49	66	0.63	72

Actual vs Target Allocation (%)



Chicago Policemen's Annuity and Benefit Fund

TOTAL ASSET ALLOCATION VS. POLICY TARGETS



Asset Allocation vs. Target				
	Current	Policy	Current	Difference*
U.S. Equity	\$544,533,224	21.00%	22.62%	1.62%
Non-US Equity	\$580,494,829	21.00%	24.11%	3.11%
Fixed Income	\$537,343,464	22.00%	22.32%	0.32%
Global Asset Allocation	\$108,059,355	5.00%	4.49%	-0.51%
Opportunistic Credit	\$107,134,805	4.00%	4.45%	0.45%
Private Debt	\$74,319,137	4.00%	3.09%	-0.91%
Private Equity	\$26,472,782	5.00%	1.10%	-3.90%
Hedge Funds	\$118,960,459	4.00%	4.94%	0.94%
Long/Short Equity	\$88,269,742	3.00%	3.67%	0.67%
Real Estate	\$134,311,160	7.00%	5.58%	-1.42%
Infrastructure	\$71,461,506	4.00%	2.97%	-1.03%
Cash	\$16,362,680	0.00%	0.68%	0.68%
Total	\$2,407,723,144	100.00%	100.00%	

*Difference between Policy and Current Allocation



Chicago Policemen's Annuity and Benefit Fund

TOTAL PLAN NET PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Composite	2,407,723,144	100.00	100.00	8.91	93	-4.41	83	0.81	87	4.20	92	5.00	84	7.62	69	8.27	Jan-84
Policy Index				11.30	78	-4.34	83	0.83	87	4.95	78	5.19	80	7.26	81	--	Jan-84
Over/Under				-2.39		-0.07		-0.02		-0.75		-0.19		0.36			
Allocation Index				10.12	88	-4.99	89	-0.30	95	3.83	95	4.63	93	7.46	76	--	Jan-84
InvMetrics Public DB Net Median				13.16		-2.56		3.57		6.00		5.93		8.08		8.28	Jan-84
Total Equity	1,213,297,795	50.39	45.00	19.00	53	-8.32	58	-0.78	56	4.85	53	5.94	47	9.69	41	6.59	Oct-96
MSCI ACWI				19.22	51	-6.25	49	2.11	46	6.14	44	6.46	43	9.16	52	6.25	Oct-96
Over/Under				-0.22		-2.07		-2.89		-1.29		-0.52		0.53		0.34	
eV All Global Equity Net Median				19.23		-6.65		0.70		5.16		5.52		9.23		7.61	Oct-96
Total Domestic Equity	544,533,224	22.62	21.00	21.74	52	-7.60	47	-0.47	49	6.25	48	7.62	43	12.20	45	10.39	Jan-84
Russell 3000				22.03	49	-3.48	35	6.53	32	10.04	32	10.03	27	13.72	28	10.78	Jan-84
Over/Under				-0.29		-4.12		-7.00		-3.79		-2.41		-1.52		-0.39	
eV All US Equity Net Median				21.88		-8.97		-1.12		5.68		6.60		11.57		11.41	Jan-84
Total Large Cap	418,171,906	17.37	13.00	20.09	49	-6.21	52	3.37	51	7.37	57	8.29	52	12.42	52	8.62	Oct-95
Russell 1000				21.82	37	-2.81	39	7.48	37	10.64	36	10.47	33	13.97	30	9.13	Oct-95
Over/Under				-1.73		-3.40		-4.11		-3.27		-2.18		-1.55		-0.51	
eV US Large Cap Equity Net Median				19.83		-5.69		3.52		8.14		8.41		12.52		9.18	Oct-95
NTGI Russell 1000	326,991,990	13.58		21.79	37	-2.84	39	7.44	37	10.60	36	10.45	33	--	--	12.17	Mar-12
Russell 1000				21.82	37	-2.81	39	7.48	37	10.64	36	10.47	33	13.97	30	12.57	Mar-12
Over/Under				-0.03		-0.03		-0.04		-0.04		-0.02				-0.40	
eV US Large Cap Equity Net Median				19.83		-5.69		3.52		8.14		8.41		12.52		10.94	Mar-12
Great Lakes	91,179,916	3.79		14.70	68	-15.65	57	-7.77	55	1.30	66	4.87	51	10.36	48	9.60	Jul-89
Russell 1000 Value				14.29	75	-16.26	63	-8.84	65	1.82	58	4.64	53	10.41	47	9.12	Jul-89
Over/Under				0.41		0.61		1.07		-0.52		0.23		-0.05		0.48	
eV US Large Cap Value Equity Net Median				16.35		-15.12		-7.33		2.60		4.88		10.32		9.26	Jul-89

*Current Policy Index: 9% Russell 1000, 3% Russell 2500 Growth, 3% Russell 2500 Value, 4% S&P 500/Citi Pur Value, 2% Russell Micro Cap Index, 6% MSCI Emerging Markets, 3% MSCI EAFE, 4% MSCI EAFE Small Cap, 8% MSCI ACWI ex USA, 3% HFRI Equity Hedge (Total) Index, 16% BBgBarc US Aggregate TR, 3% BBgBarc Global Aggregate TR, 3% JP Morgan GBI - EM Global Diversified Index, 4% NCREIF Property Index, 5% - 60% MSCI ACWI (Net) / 40% CITI WGBI, 5% Cambridge Associates US All PE, 7% NCREIF Property (1 Qtr Lag), 4% HFRI Fund of Funds Composite Index, 4% 50% BBgBarc High Yield/ 50% ICE BofA ML US HY BB-B Rated Constrained Index, 4% 30% CPI+3%/70% S&P/LSTA Leveraged Loan Index



Chicago Policemen's Annuity and Benefit Fund

TOTAL PLAN NET PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total SMID Cap	85,058,574	3.53	6.00	24.03	55	-8.47	43	-3.79	44	5.92	43	7.48	32	12.25	35	8.93	Nov-04
Russell 2500				26.56	42	-11.05	49	-4.70	47	4.08	49	5.41	44	11.46	41	8.35	Nov-04
Over/Under				-2.53		2.58		0.91		1.84		2.07		0.79		0.58	
eV US Small-Mid Cap Equity Net Median				24.43		-11.90		-5.63		3.54		4.42		10.82		8.63	Nov-04
William Blair SMID Growth	85,058,574	3.53		26.72	87	1.17	65	6.49	69	12.93	56	11.46	42	15.23	28	11.12	Nov-04
Russell 2500 Growth				32.87	52	2.02	61	9.21	63	12.10	66	9.57	59	14.45	44	10.34	Nov-04
Over/Under				-6.15		-0.85		-2.72		0.83		1.89		0.78		0.78	
eV US Small-Mid Cap Growth Equity Net Median				33.00		6.44		12.25		14.89		11.30		14.32		10.55	Nov-04
Total Micro Cap	41,302,744	1.72	2.00	33.52	24	-15.46	41	-14.04	57	--	--	--	--	--	--	-9.32	Oct-18
BMO Micro Cap Equity	41,302,744	1.72		33.52	24	-15.46	41	-14.04	57	--	--	--	--	--	--	-9.32	Oct-18
Russell Microcap				30.54	30	-11.21	26	-4.77	28	0.85	33	2.86	50	9.93	55	-9.09	Oct-18
Over/Under				2.98		-4.25		-9.27								-0.23	
eV US Micro Cap Equity Net Median				25.48		-17.52		-12.32		-1.58		2.83		10.65		-11.96	Oct-18
Total International Equity	580,494,829	24.11	21.00	19.32	44	-10.50	60	-2.30	56	3.15	47	4.05	44	6.83	50	8.37	Jan-84
MSCI ACWI ex USA				16.12	74	-11.00	62	-4.80	65	1.13	60	2.26	64	4.97	80	--	Jan-84
Over/Under				3.20		0.50		2.50		2.02		1.79		1.86		--	
eV All ACWI ex-US Equity Net Median				18.51		-8.48		-0.88		2.82		3.69		6.82		--	Jan-84
Total Developed Int'l Equity	428,374,755	17.79	15.00	19.82	41	-7.73	45	0.68	45	4.13	41	4.41	42	--	--	5.62	Jan-11
MSCI ACWI ex USA				16.12	74	-11.00	62	-4.80	65	1.13	60	2.26	64	4.97	80	2.80	Jan-11
Over/Under				3.70		3.27		5.48		3.00		2.15				2.82	
eV All ACWI ex-US Equity Net Median				18.51		-8.48		-0.88		2.82		3.69		6.82		4.44	Jan-11
Artisan Partner	99,753,549	4.14		17.08	63	-8.14	48	-0.45	48	5.42	32	3.49	53	8.41	24	6.33	Apr-05
MSCI ACWI ex USA				16.12	74	-11.00	62	-4.80	65	1.13	60	2.26	64	4.97	80	4.35	Apr-05
Over/Under				0.96		2.86		4.35		4.29		1.23		3.44		1.98	
eV All ACWI ex-US Equity Net Median				18.51		-8.48		-0.88		2.82		3.69		6.82		5.46	Apr-05
William Blair International Growth	134,108,975	5.57		24.04	8	-0.65	6	8.24	6	6.98	8	5.36	15	8.03	24	5.80	Apr-05
MSCI EAFE				14.88	73	-11.34	50	-5.13	53	0.81	47	2.05	53	5.73	72	3.95	Apr-05
Over/Under				9.16		10.69		13.37		6.17		3.31		2.30		1.85	
eV All EAFE Equity Net Median				16.61		-11.62		-4.99		0.67		2.19		6.62		4.86	Apr-05
UBS International	81,615,176	3.39		16.29	71	-12.37	70	-4.49	63	1.84	57	2.55	61	5.57	70	9.28	Jan-84
MSCI ACWI ex USA				16.12	74	-11.00	62	-4.80	65	1.13	60	2.26	64	4.97	80	--	Jan-84
Over/Under				0.17		-1.37		0.31		0.71		0.29		0.60		--	
eV All ACWI ex-US Equity Net Median				18.51		-8.48		-0.88		2.82		3.69		6.82		--	Jan-84
Acadian	112,883,301	4.69		20.10	54	-11.48	34	-2.60	34	1.47	30	6.03	25	--	--	5.87	Jan-14
MSCI EAFE Small Cap				19.88	55	-13.11	44	-3.52	45	0.53	44	3.81	45	8.02	59	3.65	Jan-14
Over/Under				0.22		1.63		0.92		0.94		2.22				2.22	
eV EAFE Small Cap Equity Net Median				20.64		-13.89		-5.28		-0.31		3.25		9.28		3.39	Jan-14



Chicago Policemen's Annuity and Benefit Fund

TOTAL PLAN NET PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Emerging Markets Equity	152,120,074	6.32	6.00	17.93	64	-17.48	92	-9.81	82	0.47	67	2.99	57	--	--	3.17	Jan-14
<i>MSCI Emerging Markets</i>				<u>18.08</u>	64	<u>-9.78</u>	51	<u>-3.39</u>	52	<u>1.90</u>	50	<u>2.86</u>	60	<u>3.27</u>	65	<u>2.30</u>	<i>Jan-14</i>
Over/Under				-0.15		-7.70		-6.42		-1.43		0.13				0.87	
<i>eV Emg Mkts All Cap Equity Net Median</i>				19.22		-9.76		-3.12		1.79		3.42		4.11		2.60	<i>Jan-14</i>
Earnest Partners Emerging Markets Equity	68,058,168	2.83		12.23	99	-23.06	99	-16.27	96	-1.94	88	0.45	86	--	--	1.69	Jan-14
<i>MSCI Emerging Markets</i>				<u>18.08</u>	64	<u>-9.78</u>	51	<u>-3.39</u>	52	<u>1.90</u>	50	<u>2.86</u>	60	<u>3.27</u>	65	<u>2.30</u>	<i>Jan-14</i>
Over/Under				-5.85		-13.28		-12.88		-3.84		-2.41				-0.61	
<i>eV Emg Mkts All Cap Equity Net Median</i>				19.22		-9.76		-3.12		1.79		3.42		4.11		2.60	<i>Jan-14</i>
Lazard	84,061,906	3.49		22.97	22	-12.34	73	-3.80	54	2.59	44	5.42	29	--	--	4.52	Jan-14
<i>MSCI Emerging Markets</i>				<u>18.08</u>	64	<u>-9.78</u>	51	<u>-3.39</u>	52	<u>1.90</u>	50	<u>2.86</u>	60	<u>3.27</u>	65	<u>2.30</u>	<i>Jan-14</i>
Over/Under				4.89		-2.56		-0.41		0.69		2.56				2.22	
<i>eV Emg Mkts All Cap Equity Net Median</i>				19.22		-9.76		-3.12		1.79		3.42		4.11		2.60	<i>Jan-14</i>
Long/Short Equities	88,269,742	3.67	3.00	2.94	85	3.42	29	9.46	25	--	--	--	--	--	--	4.31	Mar-18
<i>Long/Short Custom Index</i>				<u>0.14</u>	90	<u>0.52</u>	39	<u>1.56</u>	47	<u>1.73</u>	55	<u>1.15</u>	69	<u>0.61</u>	93	<u>1.89</u>	<i>Mar-18</i>
Over/Under				2.80		2.90		7.90								2.42	
<i>eV Alt Fundamental - Long/Short Equity Median</i>				12.70		-4.07		0.70		2.51		3.61		6.17		0.19	<i>Mar-18</i>
UBS Bucktown CPD LLC	56,383,000	2.34		3.54	82	5.39	24	11.84	22	--	--	--	--	--	--	5.70	May-18
<i>Long/Short Custom Index</i>				<u>0.14</u>	90	<u>0.52</u>	39	<u>1.56</u>	47	<u>1.73</u>	55	<u>1.15</u>	69	<u>0.61</u>	93	<u>1.92</u>	<i>May-18</i>
Over/Under				3.40		4.87		10.28								3.78	
<i>eV Alt Fundamental - Long/Short Equity Median</i>				12.70		-4.07		0.70		2.51		3.61		6.17		-0.04	<i>May-18</i>
Pluscios L/S EQ FD	31,886,742	1.32		1.90	86	0.12	40	5.48	33	--	--	--	--	--	--	2.75	Apr-18
<i>Long/Short Custom Index</i>				<u>0.14</u>	90	<u>0.52</u>	39	<u>1.56</u>	47	<u>1.73</u>	55	<u>1.15</u>	69	<u>0.61</u>	93	<u>1.91</u>	<i>Apr-18</i>
Over/Under				1.76		-0.40		3.92								0.84	
<i>eV Alt Fundamental - Long/Short Equity Median</i>				12.70		-4.07		0.70		2.51		3.61		6.17		0.31	<i>Apr-18</i>

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



Chicago Policemen's Annuity and Benefit Fund

TOTAL PLAN NET PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Fixed Income	537,343,464	22.32	22.00	3.32	65	3.10	48	4.95	49	3.70	53	3.55	52	3.84	53	7.07	Jan-84
BBgBarc US Aggregate TR				2.90	70	6.13	18	8.74	20	5.32	23	4.30	33	3.82	53	7.10	Jan-84
Over/Under				0.42		-3.03		-3.79		-1.62		-0.75		0.02		-0.03	
eV All US Fixed Inc Net Median				4.50		2.89		4.69		3.85		3.63		3.93		7.15	Jan-84
Core/Core Plus Fixed Income	411,693,338	17.10	16.00	4.68	40	5.15	81	7.57	83	5.04	74	4.37	52	--	--	4.28	Dec-10
BBgBarc US Aggregate TR				2.90	93	6.13	47	8.74	45	5.32	50	4.30	60	3.82	72	3.75	Dec-10
Over/Under				1.78		-0.98		-1.17		-0.28		0.07				0.53	
eV US Core Fixed Inc Net Median				4.42		6.07		8.61		5.30		4.38		4.07		3.96	Dec-10
Wellington	105,908,119	4.40		6.00	8	5.80	57	8.83	40	5.75	19	5.06	8	4.81	10	5.28	Dec-04
BBgBarc US Aggregate TR				2.90	93	6.13	47	8.74	45	5.32	50	4.30	60	3.82	72	4.45	Dec-04
Over/Under				3.10		-0.33		0.09		0.43		0.76		0.99		0.83	
eV US Core Fixed Inc Net Median				4.42		6.07		8.61		5.30		4.38		4.07		4.61	Dec-04
Earnest Partners Core Fixed Income	103,515,176	4.30		2.76	93	5.19	80	--	--	--	--	--	--	--	--	4.44	Nov-19
BBgBarc US Aggregate TR				2.90	93	6.13	47	8.74	45	5.32	50	4.30	60	3.82	72	6.01	Nov-19
Over/Under				-0.14		-0.94										-1.57	
eV US Core Fixed Inc Net Median				4.42		6.07		8.61		5.30		4.38		4.07		5.90	Nov-19
Garcia Hamilton	105,431,065	4.38		4.93	33	6.40	35	--	--	--	--	--	--	--	--	6.24	Nov-19
BBgBarc US Aggregate TR				2.90	93	6.13	47	8.74	45	5.32	50	4.30	60	3.82	72	6.01	Nov-19
Over/Under				2.03		0.27										0.23	
eV US Core Fixed Inc Net Median				4.42		6.07		8.61		5.30		4.38		4.07		5.90	Nov-19
National Investment Services	96,838,979	4.02		5.09	29	3.09	97	--	--	--	--	--	--	--	--	3.57	Nov-19
BBgBarc US Aggregate TR				2.90	93	6.13	47	8.74	45	5.32	50	4.30	60	3.82	72	6.01	Nov-19
Over/Under				2.19		-3.04										-2.44	
eV US Core Fixed Inc Net Median				4.42		6.07		8.61		5.30		4.38		4.07		5.90	Nov-19



Chicago Policemen's Annuity and Benefit Fund

TOTAL PLAN NET PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Global Multi Sector Fixed Income	22,573,687	0.94	3.00	5.57	74	0.74	26	3.90	18	3.11	27	3.24	27	--	--	2.97	Jun-15
BBgBarc Global Aggregate TR				3.32	89	2.98	11	4.22	16	3.79	14	3.55	20	2.81	55	3.40	Jun-15
Over/Under				2.25		-2.24		-0.32		-0.68		-0.31				-0.43	
eV Global Unconstrained Fixed Inc Net Median				6.98		-1.31		1.73		2.30		2.63		3.01		2.50	Jun-15
Manulife Asset Management	22,573,687	0.94		5.57	74	0.74	26	3.90	18	3.11	27	3.24	27	--	--	2.97	Jun-15
BBgBarc Global Aggregate TR				3.32	89	2.98	11	4.22	16	3.79	14	3.55	20	2.81	55	3.40	Jun-15
Over/Under				2.25		-2.24		-0.32		-0.68		-0.31				-0.43	
eV Global Unconstrained Fixed Inc Net Median				6.98		-1.31		1.73		2.30		2.63		3.01		2.50	Jun-15
Short Duration	55,477,902	2.30	--	0.43	99	1.09	99	2.30	99	2.29	99	--	--	--	--	2.12	Jan-17
BBgBarc US Govt/Credit 1-3 Yr. TR				1.17	99	2.88	97	4.20	99	2.87	99	2.11	99	1.63	99	2.67	Jan-17
Over/Under				-0.74		-1.79		-1.90		-0.58						-0.55	
eV US Core Fixed Inc Net Median				4.42		6.07		8.61		5.30		4.38		4.07		5.23	Jan-17
HGK Asset Management	55,477,902	2.30		0.43	97	1.09	90	2.30	93	2.29	95	--	--	--	--	2.12	Jan-17
BBgBarc US Govt/Credit 1-3 Yr. TR				1.17	85	2.88	43	4.20	44	2.87	52	2.11	64	1.63	75	2.67	Jan-17
Over/Under				-0.74		-1.79		-1.90		-0.58						-0.55	
eV US Short Duration Fixed Inc Net Median				2.54		2.73		4.06		2.89		2.27		1.91		2.78	Jan-17
Emerging Market Debt	47,598,537	1.98	3.00	1.21	99	-5.12	63	-3.80	80	--	--	--	--	--	--	-2.25	Mar-19
JP Morgan GBI - EM Global Diversified Index				9.82	90	-6.89	76	-2.82	67	1.14	68	2.34	77	1.64	79	0.97	Mar-19
Over/Under				-8.61		1.77		-0.98								-3.22	
eV All Emg Mkts Fixed Inc Net Median				12.47		-4.16		-1.17		2.35		4.25		5.09		2.70	Mar-19
Lazard EM Income Fund L	23,921,827	0.99		-5.60	99	-5.96	68	-4.31	85	--	--	--	--	--	--	-2.64	Mar-19
JP Morgan GBI - EM Global Diversified Index				9.82	90	-6.89	76	-2.82	67	1.14	68	2.34	77	1.64	79	0.97	Mar-19
Over/Under				-15.42		0.93		-1.49								-3.61	
eV All Emg Mkts Fixed Inc Net Median				12.47		-4.16		-1.17		2.35		4.25		5.09		2.70	Mar-19
Blackrock EM Local Curr	23,676,710	0.98		9.15	95	-4.27	52	--	--	--	--	--	--	--	--	-5.29	Aug-19
JP Morgan GBI - EM Global Diversified Index				9.82	90	-6.89	76	-2.82	67	1.14	68	2.34	77	1.64	79	-3.71	Aug-19
Over/Under				-0.67		2.62										-1.58	
eV All Emg Mkts Fixed Inc Net Median				12.47		-4.16		-1.17		2.35		4.25		5.09		-2.09	Aug-19



Chicago Policemen's Annuity and Benefit Fund

TOTAL PLAN NET PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Private Equity	26,472,782	1.10	5.00	1.35	--	1.41	--	6.86	--	1.26	--	3.18	--	8.92	--	7.80	Oct-95
CJA US All PE				0.00	--	-10.07	--	-5.49	--	7.35	--	8.35	--	11.93	--	13.54	Oct-95
Over/Under				1.35		11.48		12.35		-6.09		-5.17		-3.01		-5.74	
Total Infrastructure	71,461,506	2.97	4.00	-6.94	--	-6.89	--	1.85	--	14.94	--	18.17	--	15.01	--	8.25	Nov-07
NCREIF Property Index				-0.99	--	-0.29	--	2.69	--	5.44	--	6.77	--	9.70	--	6.07	Nov-07
Over/Under				-5.95		-6.60		-0.84		9.50		11.40		5.31		2.18	
Total Real Estate	134,311,160	5.58	7.00	-1.04	--	1.49	--	5.40	--	4.71	--	4.95	--	7.18	--	5.64	Oct-95
NCREIF Property Index 1 Qtr. Lag				0.71	--	2.27	--	5.28	--	6.41	--	7.65	--	10.17	--	9.29	Oct-95
Over/Under				-1.75		-0.78		0.12		-1.70		-2.70		-2.99		-3.65	
Total Hedge Funds	157,421,410	6.54	4.00	-2.04	99	-1.57	59	-0.01	61	2.16	63	--	--	--	--	3.15	Aug-16
HFRI Fund of Funds Composite Index				7.90	41	-1.57	59	0.49	58	2.26	61	1.50	64	2.79	73	2.98	Aug-16
Over/Under				-9.94		0.00		-0.50		-0.10		--	--	--	--	0.17	
eV Alt Fund of Funds - Multi-Strategy Median				7.08		-0.47		1.72		2.93		2.08		4.09		3.47	Aug-16
Pluscios	62,873,982	2.61		0.00	97	-1.13	55	0.44	59	2.34	61	--	--	--	--	3.64	Aug-16
HFRI Fund of Funds Composite Index				7.90	41	-1.57	59	0.49	58	2.26	61	1.50	64	2.79	73	2.98	Aug-16
Over/Under				-7.90		0.44		-0.05		0.08		--	--	--	--	0.66	
eV Alt Fund of Funds - Multi-Strategy Median				7.08		-0.47		1.72		2.93		2.08		4.09		3.47	Aug-16
EnTrust Permal	56,086,477	2.33		0.01	97	2.43	33	5.06	30	3.72	42	--	--	--	--	3.42	Feb-17
HFRI Fund of Funds Composite Index				7.90	41	-1.57	59	0.49	58	2.26	61	1.50	64	2.79	73	2.62	Feb-17
Over/Under				-7.89		4.00		4.57		1.46		--	--	--	--	0.80	
eV Alt Fund of Funds - Multi-Strategy Median				7.08		-0.47		1.72		2.93		2.08		4.09		3.26	Feb-17
Blueprint Capital Advisors	38,460,951	1.60		-7.84	99	-7.52	83	-7.49	88	--	--	--	--	--	--	-1.13	Aug-17
Blueprint Capital Custom Index				7.90	41	-1.57	59	0.49	58	--	--	--	--	--	--	1.97	Aug-17
Over/Under				-15.74		-5.95		-7.98		--	--	--	--	--	--	-3.10	
eV Alt Fund of Funds - Multi-Strategy Median				7.08		-0.47		1.72		2.93		2.08		4.09		2.72	Aug-17



Chicago Policemen's Annuity and Benefit Fund

TOTAL PLAN NET PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Global Asset Allocation	108,059,355	4.49	5.00	12.29	27	-5.77	58	-2.33	63	2.05	55	2.92	50	--	--	4.24	Dec-11
60% MSCI ACWI (Net) / 40% FTSE WGBI				12.16	27	-1.78	32	3.67	20	5.62	15	5.64	10	6.64	32	6.07	Dec-11
Over/Under				0.13		-3.99		-6.00		-3.57		-2.72				-1.83	
eV Global TAA Net Median				9.32		-5.06		-0.71		2.41		2.87		5.76		4.83	Dec-11
PIMCO	108,059,355	4.49		12.29	27	-5.77	58	-2.33	63	2.21	54	3.37	43	--	--	4.00	Dec-11
PIMCO All Asset Index				6.21	71	3.13	3	6.35	6	5.14	17	4.77	16	5.02	65	4.50	Dec-11
Over/Under				6.08		-8.90		-8.68		-2.93		-1.40				-0.50	
eV Global TAA Net Median				9.32		-5.06		-0.71		2.41		2.87		5.76		4.83	Dec-11
Opportunistic Credit	61,589,884	2.56	4.00	-2.52	--	-4.33	--	-4.50	--	1.65	--	--	--	--	--	2.77	Nov-16
Opportunistic Credit Custom Index				9.94	--	-4.20	--	-0.98	--	2.81	--	--	--	--	--	3.55	Nov-16
Over/Under				-12.46		-0.13		-3.52		-1.16						-0.78	
Beach Point LP	24,074,943	1.00		-3.67	--	-4.99	--	1.11	--	3.97	--	--	--	--	--	5.31	Dec-16
Voya Credit Opportunities	10,732,910	0.45		7.63	--	8.33	--	11.03	--	5.69	--	--	--	--	--	5.60	Nov-16
Eagle Point Credit Management	16,599,374	0.69		-11.64	--	-11.02	--	-21.56	--	--	--	--	--	--	--	-7.64	Aug-18
Voya Bank Loan	10,182,657	0.42		7.97	--	-5.65	--	-3.10	--	--	--	--	--	--	--	1.21	Jan-19
Private Debt	81,403,108	3.38	4.00	-8.22	--	-6.63	--	-2.50	--	4.93	--	--	--	--	--	4.75	Nov-16
Private Debt Custom Index				0.84	--	1.99	--	4.59	--	5.04	--	--	--	--	--	4.88	Nov-16
Over/Under				-9.06		-8.62		-7.09		-0.11						-0.13	
Cash	15,554,215	0.65	0.00	0.54	--	0.86	--	1.91	--	1.87	--	1.34	--	--	--	0.84	Dec-10
91 Day T-Bills				0.03	--	0.40	--	1.30	--	1.66	--	1.13	--	0.59	--	0.61	Dec-10
Over/Under				0.51		0.46		0.61		0.21		0.21				0.23	
Cash	15,319,130	0.64		0.59	30	0.91	27	1.96	28	1.89	37	1.35	50	0.82	25	2.41	Sep-98
91 Day T-Bills				0.03	89	0.40	78	1.30	89	1.66	71	1.13	75	0.59	69	1.80	Sep-98
Over/Under				0.56		0.51		0.66		0.23		0.22		0.23		0.61	
Benefit Payments Account	235,085	0.01		0.11	--	--	--	--	--	--	--	--	--	--	--	0.11	Apr-20
91 Day T-Bills				0.03	--	0.40	--	1.30	--	1.66	--	1.13	--	0.59	--	0.03	Apr-20
Over/Under				0.08												0.08	
Transitions	808,465	0.03	--	7.01	--	-0.36	--	2.45	--	4.27	--	5.54	--	--	--	3.42	Jul-14
Tax Reclaims	808,465	0.03		7.01	--	-0.36	--	2.45	--	4.27	--	5.54	--	--	--	3.42	Jul-14

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

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

