

Q4 2020 PERFORMANCE REPORT

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO

Performance Period Ending December 31, 2020

Kevin Leonard, Partner

Kristin Finney-Cooke, CAIA, Senior Consultant

DeAnna I. Jones, Senior Consultant Specialist



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 December 31, 2020					Inception (%)	Inception Date
				3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)		
Composite	2,651,620,748	100.0	100.0	10.6	10.6	6.8	8.8	7.6	8.6	Jan-84
<i>Policy Index</i>				10.3	11.1	7.8	9.1	7.5	--	Jan-84
<i>Allocation Index</i>				10.0	9.4	6.2	8.3	7.3	--	Jan-84
Total Equity	1,448,298,537	54.6	45.0	17.1	16.5	9.1	12.2	10.0	7.5	Oct-96
<i>MSCI ACWI</i>				14.7	16.3	10.1	12.3	9.1	7.1	Oct-96
Total Fixed Income	494,306,030	18.6	22.0	2.0	6.6	4.4	4.4	4.0	7.1	Jan-84
<i>BBgBarc US Aggregate TR</i>				0.7	7.5	5.3	4.4	3.8	7.0	Jan-84
Total Private Equity	37,400,951	1.4	5.0	5.6	14.4	9.9	5.2	9.7	8.2	Oct-95
<i>CJA US All PE</i>				0.0	9.3	11.2	12.8	12.7	14.1	Oct-95
Total Infrastructure	70,195,409	2.6	4.0	-2.3	-9.2	4.5	15.8	14.0	7.7	Nov-07
<i>NCREIF Property Index</i>				1.2	1.6	4.9	5.9	9.0	6.0	Nov-07
Total Real Estate	144,000,055	5.4	7.0	0.2	-2.8	2.0	3.5	5.8	5.4	Oct-95
<i>NCREIF Property Index 1 Qtr. Lag</i>				0.7	2.0	5.1	6.3	9.4	9.1	Oct-95
Total Hedge Funds	157,168,478	5.9	4.0	4.5	0.6	1.8	--	--	3.3	Aug-16
<i>HFRI Fund of Funds Composite Index</i>				7.9	10.7	4.8	4.5	3.3	5.4	Aug-16
Total Global Asset Allocation	124,224,332	4.7	5.0	12.2	8.3	4.7	7.3	--	5.6	Dec-11
<i>60% MSCI ACWI (Net) / 40% FTSE WGBI</i>				9.9	14.5	8.4	9.5	6.6	7.5	Dec-11
Opportunistic Credit	72,313,758	2.7	4.0	9.9	12.8	6.5	--	--	6.6	Nov-16
<i>Opportunistic Credit Custom Index</i>				5.1	5.1	5.2	6.7	--	5.4	Nov-16
Private Debt	82,556,252	3.1	4.0	2.6	-2.5	5.6	--	--	5.3	Nov-16
<i>Private Debt Custom Index</i>				0.8	3.6	4.8	--	--	4.7	Nov-16
Cash	20,439,903	0.8	0.0	0.7	1.7	2.0	1.5	0.9	0.9	Dec-10
<i>91 Day T-Bills</i>				0.0	0.5	1.5	1.1	0.6	0.6	Dec-10
Transitions	717,043	0.0	--	2.0	4.3	4.9	6.3	--	3.9	Jul-14

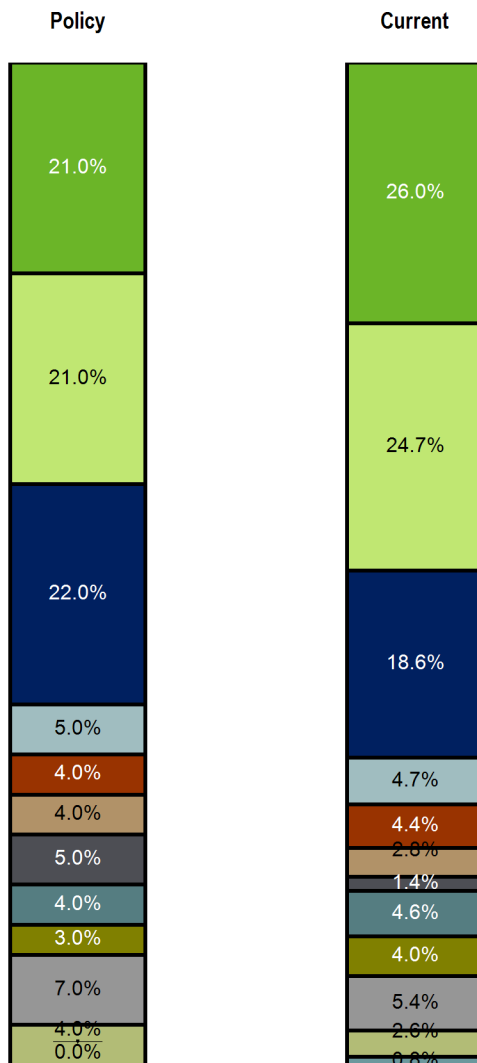
*Opportunistic Credit Custom Index: 50% BBgBarc High Yield / 50% ICE BofA ML US HY BB-B Rated Constrained Index.

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



Chicago Policemen's Annuity and Benefit Fund

TOTAL ASSET ALLOCATION VS. POLICY TARGETS



Asset Allocation vs. Target					
		Current	Policy	Current	Difference*
U.S. Equity	\$688,464,136	21.00%	25.96%	4.96%	
Non-US Equity	\$654,930,252	21.00%	24.70%	3.70%	
Fixed Income	\$494,306,030	22.00%	18.64%	-3.36%	
Global Asset Allocation	\$124,224,332	5.00%	4.68%	-0.32%	
Opportunistic Credit	\$115,674,984	4.00%	4.36%	0.36%	
Private Debt	\$75,260,458	4.00%	2.84%	-1.16%	
Private Equity	\$37,400,951	5.00%	1.41%	-3.59%	
Hedge Funds	\$121,103,047	4.00%	4.57%	0.57%	
Long/Short Equity	\$104,904,149	3.00%	3.96%	0.96%	
Real Estate	\$144,000,055	7.00%	5.43%	-1.57%	
Infrastructure	\$70,195,409	4.00%	2.65%	-1.35%	
Cash	\$21,156,946	0.00%	0.80%	0.80%	
Total	\$2,651,620,748	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	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Composite	2,651,620,748	100.00	100.00	10.58	40	10.64	78	6.79	90	8.77	81	7.64	74	8.58	Jan-84
Policy Index				10.28	48	11.07	75	7.83	73	9.05	72	7.46	80	--	Jan-84
Over/Under				0.30		-0.43		-1.04		-0.28		0.18			
Allocation Index				10.00	57	9.41	89	6.21	96	8.26	91	7.27	87	--	Jan-84
InvMetrics Public DB Net Median				10.16		12.81		8.86		9.76		8.15		8.57	Jan-84
Total Equity	1,448,298,537	54.62	45.00	17.08	33	16.50	45	9.11	51	12.22	42	9.95	37	7.51	Oct-96
MSCI ACWI				14.68	46	16.25	47	10.06	47	12.26	42	9.13	52	7.07	Oct-96
Over/Under				2.40		0.25		-0.95		-0.04		0.82		0.44	
eV All Global Equity Net Median				14.16		15.06		9.17		10.95		9.19		8.74	Oct-96
Total Domestic Equity	688,464,136	25.96	21.00	16.96	54	17.13	45	10.98	48	13.14	47	12.43	44	10.95	Jan-84
Russell 3000				14.68	64	20.89	37	14.49	34	15.43	32	13.79	30	11.30	Jan-84
Over/Under				2.28		-3.76		-3.51		-2.29		-1.36		-0.35	
eV All US Equity Net Median				17.87		14.53		10.34		12.67		11.81		12.14	Jan-84
Total Large Cap	516,585,067	19.48	13.00	14.51	33	16.16	44	11.24	51	13.03	51	12.50	51	9.37	Oct-95
Russell 1000				13.69	38	20.96	34	14.82	34	15.60	31	14.01	30	9.89	Oct-95
Over/Under				0.82		-4.80		-3.58		-2.57		-1.51		-0.52	
eV US Large Cap Equity Net Median				12.51		14.08		11.26		13.03		12.51		9.92	Oct-95
NTGI Russell 1000	406,818,834	15.34		13.68	38	20.87	34	14.76	34	15.56	31	--	--	14.23	Mar-12
Russell 1000				13.69	38	20.96	34	14.82	34	15.60	31	14.01	30	14.62	Mar-12
Over/Under				-0.01		-0.09		-0.06		-0.04				-0.39	
eV US Large Cap Equity Net Median				12.51		14.08		11.26		13.03		12.51		12.73	Mar-12
Great Lakes	109,766,233	4.14		17.69	30	2.78	55	4.65	67	9.44	59	10.38	52	10.13	Jul-89
Russell 1000 Value				16.25	42	2.79	55	6.07	49	9.74	51	10.50	48	9.68	Jul-89
Over/Under				1.44		-0.01		-1.42		-0.30		-0.12		0.45	
eV US Large Cap Value Equity Net Median				15.70		3.44		5.97		9.80		10.44		9.72	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	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total SMID Cap	111,713,405	4.21	6.00	21.14	81	20.48	44	12.14	43	14.36	39	12.53	30	10.50	Nov-04
Russell 2500				27.41	27	19.99	45	11.33	48	13.64	41	11.97	35	10.10	Nov-04
Over/Under				-6.27		0.49		0.81		0.72		0.56		0.40	
eV US Small-Mid Cap Equity Net Median				24.26		16.53		10.07		12.39		11.05		10.26	Nov-04
William Blair SMID Growth	111,713,405	4.21		21.14	71	33.16	62	19.47	59	18.66	53	15.75	33	12.66	Nov-04
Russell 2500 Growth				25.89	26	40.47	48	19.91	58	18.68	52	15.00	41	12.20	Nov-04
Over/Under				-4.75		-7.31		-0.44		-0.02		0.75		0.46	
eV US Small-Mid Cap Growth Equity Net Median				22.61		40.24		22.08		18.71		14.48		12.06	Nov-04
Total Micro Cap	60,165,664	2.27	2.00	32.93	37	23.64	33	--	--	--	--	--	--	9.73	Oct-18
BMO Micro Cap Equity	60,165,664	2.27		32.93	37	23.64	33	--	--	--	--	--	--	9.73	Oct-18
Russell Microcap				31.39	52	20.96	40	8.78	38	11.89	46	10.55	55	6.53	Oct-18
Over/Under				1.54		2.68								3.20	
eV US Micro Cap Equity Net Median				31.49		13.88		7.17		11.03		10.69		3.56	Oct-18
Total International Equity	654,930,252	24.70	21.00	17.90	32	15.13	54	7.32	49	11.32	39	7.19	45	8.99	Jan-84
MSCI ACWI ex USA				17.01	43	10.65	63	4.88	63	8.93	62	4.92	79	--	Jan-84
Over/Under				0.89		4.48		2.44		2.39		2.27			
eV All ACWI ex-US Equity Net Median				16.28		16.41		7.08		10.45		6.84		--	Jan-84
Total Developed Int'l Equity	452,074,100	17.05	15.00	15.11	67	16.73	50	7.97	46	10.57	49	7.84	39	7.84	Jan-11
MSCI ACWI ex USA				17.01	43	10.65	63	4.88	63	8.93	62	4.92	79	4.92	Jan-11
Over/Under				-1.90		6.08		3.09		1.64		2.92		2.92	
eV All ACWI ex-US Equity Net Median				16.28		16.41		7.08		10.45		6.84		6.84	Jan-11
Artisan Partner	90,103,963	3.40		8.15	99	6.12	80	7.22	49	8.02	68	7.73	39	7.10	Apr-05
MSCI ACWI ex USA				17.01	43	10.65	63	4.88	63	8.93	62	4.92	79	5.66	Apr-05
Over/Under				-8.86		-4.53		2.34		-0.91		2.81		1.44	
eV All ACWI ex-US Equity Net Median				16.28		16.41		7.08		10.45		6.84		6.92	Apr-05
William Blair International Growth	139,090,401	5.25		16.24	35	30.34	5	12.24	6	12.49	9	8.56	17	7.44	Apr-05
MSCI EAFE				16.05	37	7.81	53	4.28	53	7.45	54	5.51	73	5.12	Apr-05
Over/Under				0.19		22.53		7.96		5.04		3.05		2.32	
eV All EAFE Equity Net Median				14.95		8.01		4.42		7.59		6.44		6.32	Apr-05
UBS International	106,301,338	4.01		21.35	14	15.03	54	6.76	52	10.54	50	6.10	65	9.96	Jan-84
MSCI ACWI ex USA				17.01	43	10.65	63	4.88	63	8.93	62	4.92	79	--	Jan-84
Over/Under				4.34		4.38		1.88		1.61		1.18			
eV All ACWI ex-US Equity Net Median				16.28		16.41		7.08		10.45		6.84		--	Jan-84
Acadian	116,564,633	4.40		15.30	49	12.68	40	4.57	43	11.09	21	--	--	9.14	Jan-14
MSCI EAFE Small Cap				17.27	33	12.34	42	4.85	42	9.40	45	7.85	59	7.25	Jan-14
Over/Under				-1.97		0.34		-0.28		1.69				1.89	
eV EAFE Small Cap Equity Net Median				15.11		9.84		3.52		8.94		8.53		6.79	Jan-14



Chicago Policemen's Annuity and Benefit Fund

TOTAL PLAN NET PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Emerging Markets Equity	202,856,151	7.65	6.00	25.91	10	11.04	82	5.57	61	13.24	51	--	--	7.40	Jan-14
<i>MSCI Emerging Markets</i>				<u>19.70</u>	54	<u>18.31</u>	51	<u>6.17</u>	55	<u>12.81</u>	56	<u>3.63</u>	68	<u>6.17</u>	<i>Jan-14</i>
Over/Under				6.21		-7.27		-0.60		0.43				1.23	
<i>eV Emg Mkts All Cap Equity Net Median</i>				19.88		18.33		6.84		13.36		4.31		6.64	<i>Jan-14</i>
Earnest Partners Emerging Markets Equity	90,422,225	3.41		29.92	1	3.31	94	4.13	78	11.12	76	--	--	5.94	Jan-14
<i>MSCI Emerging Markets</i>				<u>19.70</u>	54	<u>18.31</u>	51	<u>6.17</u>	55	<u>12.81</u>	56	<u>3.63</u>	68	<u>6.17</u>	<i>Jan-14</i>
Over/Under				10.22		-15.00		-2.04		-1.69				-0.23	
<i>eV Emg Mkts All Cap Equity Net Median</i>				19.88		18.33		6.84		13.36		4.31		6.64	<i>Jan-14</i>
Lazard	112,433,926	4.24		22.86	23	18.17	52	6.80	51	15.16	28	--	--	8.73	Jan-14
<i>MSCI Emerging Markets</i>				<u>19.70</u>	54	<u>18.31</u>	51	<u>6.17</u>	55	<u>12.81</u>	56	<u>3.63</u>	68	<u>6.17</u>	<i>Jan-14</i>
Over/Under				3.16		-0.14		0.63		2.35				2.56	
<i>eV Emg Mkts All Cap Equity Net Median</i>				19.88		18.33		6.84		13.36		4.31		6.64	<i>Jan-14</i>
Long/Short Equities	104,904,149	3.96	3.00	12.50	51	22.91	33	--	--	--	--	--	--	10.04	Mar-18
<i>Long/Short Custom Index</i>				<u>0.02</u>	93	<u>0.58</u>	83	<u>1.56</u>	78	<u>1.16</u>	92	<u>0.60</u>	96	<u>1.58</u>	<i>Mar-18</i>
Over/Under				12.48		22.33								8.46	
<i>eV Alt Fundamental - Long/Short Equity Median</i>				12.68		14.83		6.61		8.14		6.57		6.55	<i>Mar-18</i>
UBS Bucktown CPD LLC	65,331,000	2.46		10.26	60	22.12	35	--	--	--	--	--	--	10.55	May-18
<i>Long/Short Custom Index</i>				<u>0.02</u>	93	<u>0.58</u>	83	<u>1.56</u>	78	<u>1.16</u>	92	<u>0.60</u>	96	<u>1.58</u>	<i>May-18</i>
Over/Under				10.24		21.54								8.97	
<i>eV Alt Fundamental - Long/Short Equity Median</i>				12.68		14.83		6.61		8.14		6.57		7.30	<i>May-18</i>
Pluscios L/S EQ FD	39,573,149	1.49		16.42	36	24.25	32	--	--	--	--	--	--	10.60	Apr-18
<i>Long/Short Custom Index</i>				<u>0.02</u>	93	<u>0.58</u>	83	<u>1.56</u>	78	<u>1.16</u>	92	<u>0.60</u>	96	<u>1.58</u>	<i>Apr-18</i>
Over/Under				16.40		23.67								9.02	
<i>eV Alt Fundamental - Long/Short Equity Median</i>				12.68		14.83		6.61		8.14		6.57		7.09	<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	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Fixed Income	494,306,030	18.64	22.00	2.00	41	6.60	46	4.39	58	4.36	52	3.98	52	7.07	Jan-84
BBgBarc US Aggregate TR				0.67	71	7.51	37	5.34	40	4.44	50	3.84	56	7.04	Jan-84
Over/Under				1.33		-0.91		-0.95		-0.08		0.14		0.03	
eV All US Fixed Inc Net Median				1.39		6.15		4.77		4.43		4.04		7.23	Jan-84
Core/Core Plus Fixed Income	418,509,772	15.78	16.00	1.31	29	8.02	59	5.46	59	4.88	39	4.46	28	4.34	Dec-10
BBgBarc US Aggregate TR				0.67	80	7.51	76	5.34	72	4.44	76	3.84	74	3.70	Dec-10
Over/Under				0.64		0.51		0.12		0.44		0.62		0.64	
eV US Core Fixed Inc Net Median				1.03		8.20		5.57		4.73		4.12		4.00	Dec-10
Wellington	107,912,236	4.07		2.09	4	9.64	13	6.35	8	5.84	3	4.90	7	5.35	Dec-04
BBgBarc US Aggregate TR				0.67	80	7.51	76	5.34	72	4.44	76	3.84	74	4.39	Dec-04
Over/Under				1.42		2.13		1.01		1.40		1.06		0.96	
eV US Core Fixed Inc Net Median				1.03		8.20		5.57		4.73		4.12		4.62	Dec-04
Earnest Partners Core Fixed Income	103,841,369	3.92		0.61	82	7.14	85	--	--	--	--	--	--	5.44	Nov-19
BBgBarc US Aggregate TR				0.67	80	7.51	76	5.34	72	4.44	76	3.84	74	6.29	Nov-19
Over/Under				-0.06		-0.37								-0.85	
eV US Core Fixed Inc Net Median				1.03		8.20		5.57		4.73		4.12		6.86	Nov-19
Garcia Hamilton	105,981,200	4.00		0.72	76	7.97	63	--	--	--	--	--	--	6.65	Nov-19
BBgBarc US Aggregate TR				0.67	80	7.51	76	5.34	72	4.44	76	3.84	74	6.29	Nov-19
Over/Under				0.05		0.46								0.36	
eV US Core Fixed Inc Net Median				1.03		8.20		5.57		4.73		4.12		6.86	Nov-19
National Investment Services	100,774,966	3.80		1.84	7	7.28	82	--	--	--	--	--	--	6.63	Nov-19
BBgBarc US Aggregate TR				0.67	80	7.51	76	5.34	72	4.44	76	3.84	74	6.29	Nov-19
Over/Under				1.17		-0.23								0.34	
eV US Core Fixed Inc Net Median				1.03		8.20		5.57		4.73		4.12		6.86	Nov-19



Chicago Policemen's Annuity and Benefit Fund

TOTAL PLAN NET PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Global Multi Sector Fixed Income	23,728,444	0.89	3.00	3.73	61	7.50	32	4.94	23	4.63	51	--	--	3.90	Jun-15
BBgBarc Global Aggregate TR				3.28	70	9.20	25	4.85	24	4.79	41	2.83	69	4.18	Jun-15
Over/Under				0.45		-1.70		0.09		-0.16				-0.28	
eV Global Unconstrained Fixed Inc Net Median				4.63		5.58		3.57		4.65		3.19		3.49	Jun-15
Manulife Asset Management	23,728,444	0.89		3.73	61	7.50	32	4.94	23	4.63	51	--	--	3.90	Jun-15
BBgBarc Global Aggregate TR				3.28	70	9.20	25	4.85	24	4.79	41	2.83	69	4.18	Jun-15
Over/Under				0.45		-1.70		0.09		-0.16				-0.28	
eV Global Unconstrained Fixed Inc Net Median				4.63		5.58		3.57		4.65		3.19		3.49	Jun-15
Short Duration	42,409	0.00	--	0.04	99	1.23	99	2.08	99	--	--	--	--	1.89	Jan-17
BBgBarc US Govt/Credit 1-3 Yr. TR				0.21	97	3.33	99	2.98	99	2.21	99	1.60	99	2.44	Jan-17
Over/Under				-0.17		-2.10		-0.90						-0.55	
eV US Core Fixed Inc Net Median				1.03		8.20		5.57		4.73		4.12		5.14	Jan-17
HGK Asset Management	42,409	0.00		0.04	96	1.23	99	2.08	97	--	--	--	--	1.89	Jan-17
BBgBarc US Govt/Credit 1-3 Yr. TR				0.21	77	3.33	71	2.98	66	2.21	73	1.60	77	2.44	Jan-17
Over/Under				-0.17		-2.10		-0.90						-0.55	
eV US Short Duration Fixed Inc Net Median				0.44		3.59		3.15		2.52		1.87		2.69	Jan-17
Emerging Market Debt	52,025,406	1.96	3.00	7.77	53	3.70	77	--	--	--	--	--	--	3.25	Mar-19
JP Morgan GBI - EM Global Diversified Index				9.62	21	2.69	83	3.01	77	6.72	67	1.49	78	6.23	Mar-19
Over/Under				-1.85		1.01								-2.98	
eV All Emg Mkts Fixed Inc Net Median				7.88		6.11		4.36		7.18		4.95		7.68	Mar-19
Lazard EM Income Fund L	25,386,123	0.96		5.31	89	-0.20	98	--	--	--	--	--	--	1.30	Mar-19
JP Morgan GBI - EM Global Diversified Index				9.62	21	2.69	83	3.01	77	6.72	67	1.49	78	6.23	Mar-19
Over/Under				-4.31		-2.89								-4.93	
eV All Emg Mkts Fixed Inc Net Median				7.88		6.11		4.36		7.18		4.95		7.68	Mar-19
Blackrock EM Local Curr	26,639,283	1.00		10.23	16	7.71	27	--	--	--	--	--	--	4.59	Aug-19
JP Morgan GBI - EM Global Diversified Index				9.62	21	2.69	83	3.01	77	6.72	67	1.49	78	4.34	Aug-19
Over/Under				0.61		5.02								0.25	
eV All Emg Mkts Fixed Inc Net Median				7.88		6.11		4.36		7.18		4.95		5.76	Aug-19



Chicago Policemen's Annuity and Benefit Fund

TOTAL PLAN NET PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Private Equity	37,400,951	1.41	5.00	5.61	--	14.40	--	9.90	--	5.25	--	9.68	--	8.16	Oct-95
CJA US All PE				0.00	--	9.25	--	11.22	--	12.85	--	12.68	--	14.13	Oct-95
Over/Under				5.61		5.15		-1.32		-7.60		-3.00		-5.97	
Total Infrastructure	70,195,409	2.65	4.00	-2.28	--	-9.25	--	4.53	--	15.80	--	14.04	--	7.72	Nov-07
NCREIF Property Index				1.15	--	1.61	--	4.89	--	5.91	--	9.00	--	5.98	Nov-07
Over/Under				-3.43		-10.86		-0.36		9.89		5.04		1.74	
Total Real Estate	144,000,055	5.43	7.00	0.22	--	-2.77	--	1.97	--	3.55	--	5.82	--	5.35	Oct-95
NCREIF Property Index 1 Qtr. Lag				0.74	--	2.01	--	5.11	--	6.28	--	9.37	--	9.08	Oct-95
Over/Under				-0.52		-4.78		-3.14		-2.73		-3.55		-3.73	
Total Hedge Funds	157,168,478	5.93	4.00	4.48	85	0.57	93	1.82	87	--	--	--	--	3.29	Aug-16
HFRI Fund of Funds Composite Index				7.94	46	10.71	59	4.82	67	4.52	62	3.31	79	5.40	Aug-16
Over/Under				-3.46		-10.14		-3.00						-2.11	
eV Alt Fund of Funds - Multi-Strategy Median				7.43		12.96		6.44		5.75		5.28		6.44	Aug-16



Chicago Policemen's Annuity and Benefit Fund

TOTAL PLAN NET PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Global Asset Allocation	124,224,332	4.68	5.00	12.16	18	8.32	55	4.71	55	7.32	41	--	--	5.61	Dec-11
60% MSCI ACWI (Net) / 40% FTSE WGBI				9.91	35	14.53	17	8.41	11	9.51	15	6.61	29	7.53	Dec-11
Over/Under				2.25		-6.21		-3.70		-2.19				-1.92	
eV Global TAA Net Median				8.74		8.94		5.02		6.60		5.60		5.96	Dec-11
PIMCO	124,224,332	4.68		12.16	18	8.32	55	4.87	53	8.23	32	--	--	5.38	Dec-11
PIMCO All Asset Index				3.16	99	9.10	49	6.28	33	6.12	54	5.11	62	4.89	Dec-11
Over/Under				9.00		-0.78		-1.41		2.11				0.49	
eV Global TAA Net Median				8.74		8.94		5.02		6.60		5.60		5.96	Dec-11
Opportunistic Credit	72,313,758	2.73	4.00	9.91	--	12.80	--	6.46	--	--	--	--	--	6.57	Nov-16
Opportunistic Credit Custom Index				5.13	--	5.12	--	5.24	--	6.69	--	--	--	5.44	Nov-16
Over/Under				4.78		7.68		1.22						1.13	
Private Debt	82,556,252	3.11	4.00	2.60	--	-2.47	--	5.64	--	--	--	--	--	5.26	Nov-16
Private Debt Custom Index				0.80	--	3.63	--	4.82	--	--	--	--	--	4.68	Nov-16
Over/Under				1.80		-6.10		0.82						0.58	
Cash	20,439,903	0.77	0.00	0.73	--	1.67	--	1.95	--	1.49	--	0.88	--	0.88	Dec-10
91 Day T-Bills				0.02	--	0.45	--	1.48	--	1.13	--	0.59	--	0.59	Dec-10
Over/Under				0.71		1.22		0.47		0.36		0.29		0.29	
Cash	19,996,662	0.75		0.80	3	1.79	12	1.99	22	1.51	28	0.89	25	2.40	Sep-98
91 Day T-Bills				0.02	40	0.45	78	1.48	70	1.13	76	0.59	70	1.76	Sep-98
Over/Under				0.78		1.34		0.51		0.38		0.30		0.64	
Benefit Payments Account	443,242	0.02		0.03	--	--	--	--	--	--	--	--	--	0.18	Apr-20
91 Day T-Bills				0.02	--	0.45	--	1.48	--	1.13	--	0.59	--	0.08	Apr-20
Over/Under				0.01										0.10	
Transitions	717,043	0.03	--	1.97	--	4.30	--	4.92	--	6.33	--	--	--	3.88	Jul-14
Tax Reclaims	717,043	0.03		1.97	--	4.30	--	4.92	--	6.33	--	--	--	3.88	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%

