



Q4 2019 PERFORMANCE REPORT

POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO

March 30, 2020

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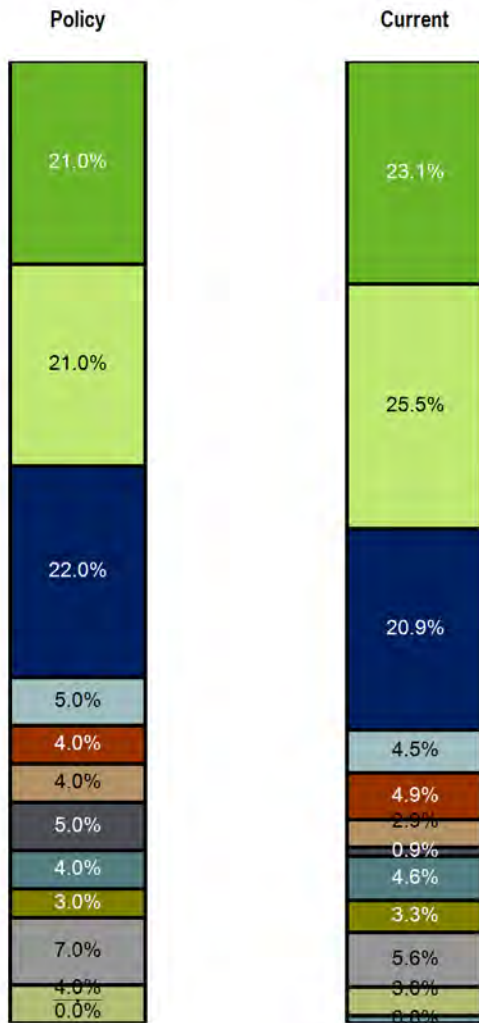
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BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

TOTAL ASSET ALLOCATION VS. POLICY TARGETS



Asset Allocation vs. Target				
	Current	Policy	Current	Difference*
U.S. Equity	\$591,019,377	21.00%	23.07%	2.07%
Non-US Equity	\$652,183,043	21.00%	25.46%	4.46%
Fixed Income	\$535,519,824	22.00%	20.90%	-1.10%
Global Asset Allocation	\$114,677,625	5.00%	4.48%	-0.52%
Opportunistic Credit	\$125,063,924	4.00%	4.88%	0.88%
Private Debt	\$73,614,900	4.00%	2.87%	-1.13%
Private Equity	\$23,516,693	5.00%	0.92%	-4.08%
Hedge Funds	\$118,351,269	4.00%	4.62%	0.62%
Long/Short Equity	\$85,347,797	3.00%	3.33%	0.33%
Real Estate	\$144,096,338	7.00%	5.62%	-1.38%
Infrastructure	\$76,884,846	4.00%	3.00%	-1.00%
Cash	\$21,543,696	0.00%	0.84%	0.84%
Total	\$2,561,819,334	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	2,561,819,334	100.00	100.00	4.99	69	16.31	87	8.86	69	6.50	72	7.85	60	8.52	Jan-84
Policy Index				5.06	66	15.38	93	8.91	67	6.60	67	7.61	74	--	Jan-84
Over/Under				-0.07		0.93		-0.05		-0.10		0.24			
Allocation Index				5.00	69	15.50	93	8.23	86	6.17	85	7.73	65	--	Jan-84
InvMetrics Public DB Net Median				5.37		19.22		9.47		6.92		8.05		8.25	Jan-84
Total Equity	1,328,550,218	51.86	45.00	9.27	37	25.79	53	12.91	39	8.57	43	9.87	38	7.14	Oct-96
MSCI ACWI				8.95	43	26.60	47	12.44	44	8.41	45	8.79	59	6.69	Oct-96
Over/Under				0.32		-0.81		0.47		0.16		1.08		0.45	
eV All Global Equity Net Median				8.61		26.12		11.74		8.02		9.30		8.11	Oct-96
Total Domestic Equity	591,019,377	23.07	21.00	8.33	46	26.87	57	12.95	42	10.09	40	12.45	49	10.78	Jan-84
Russell 3000				9.10	33	31.02	32	14.57	32	11.24	26	13.42	27	11.05	Jan-84
Over/Under				-0.77		-4.15		-1.62		-1.15		-0.97		-0.27	
eV All US Equity Net Median				8.05		28.02		11.66		9.34		12.34		11.59	Jan-84
Total Large Cap	408,095,029	15.93	13.00	9.40	32	28.81	51	13.16	52	10.14	50	12.41	54	9.10	Oct-95
Russell 1000				9.04	37	31.43	35	15.05	37	11.48	30	13.54	25	9.45	Oct-95
Over/Under				0.36		-2.62		-1.89		-1.34		-1.13		-0.35	
eV US Large Cap Equity Net Median				8.26		28.91		13.31		10.12		12.57		9.58	Oct-95
NTGI Russell 1000	298,507,827	11.65		9.04	37	31.43	35	15.02	38	11.47	30	--	--	13.41	Mar-12
Russell 1000				9.04	37	31.43	35	15.05	37	11.48	30	13.54	25	13.84	Mar-12
Over/Under				0.00		0.00		-0.03		-0.01				-0.43	
eV US Large Cap Equity Net Median				8.26		28.91		13.31		10.12		12.57		12.68	Mar-12
Great Lakes	109,587,202	4.28		10.04	15	27.98	34	9.71	60	8.57	43	11.90	36	10.38	Jul-89
S&P 500/Citi Pure Value				7.56	53	25.45	59	9.13	69	7.39	72	13.83	5	--	Jul-89
Over/Under				2.48		2.53		0.58		1.18		-1.93			
eV US Large Cap Value Equity Net Median				7.67		26.31		10.28		8.21		11.33		10.06	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	133,674,229	5.22	6.00	5.74	86	25.79	69	13.75	29	10.74	23	12.75	38	9.87	Nov-04
Russell 2500				8.54	35	27.77	57	10.33	51	8.93	42	12.58	42	9.48	Nov-04
Over/Under				-2.80		-1.98		3.42		1.81		0.17		0.39	
eV US Small-Mid Cap Equity Net Median				7.76		28.56		10.50		8.39		12.08		9.78	Nov-04
William Blair SMID Growth	84,153,679	3.28		4.35	97	30.65	58	18.31	32	13.19	16	14.70	28	11.42	Nov-04
Russell 2500 Growth				10.57	26	32.65	40	15.17	59	10.84	52	14.01	42	10.55	Nov-04
Over/Under				-6.22		-2.00		3.14		2.35		0.69		0.87	
eV US Small-Mid Cap Growth Equity Net Median				8.48		31.26		16.69		10.89		13.51		10.60	Nov-04
Fisher Investment	53,055	0.00		7.05	57	25.70	54	11.35	11	9.50	9	--	--	11.46	Feb-13
Russell 2500 Value				7.07	57	23.56	63	6.12	57	7.18	41	11.25	38	9.65	Feb-13
Over/Under				-0.02		2.14		5.23		2.32		--		1.81	
eV US Small-Mid Cap Value Equity Net Median				7.28		26.38		6.46		6.64		11.01		9.62	Feb-13
Chicago Equity SMID Value	49,467,495	1.93		6.23	74	18.33	90	--	--	--	--	--	--	1.68	May-18
Russell 2500 Value				7.07	57	23.56	63	6.12	57	7.18	41	11.25	38	5.91	May-18
Over/Under				-0.84		-5.23		--		--		--		-4.23	
eV US Small-Mid Cap Value Equity Net Median				7.28		26.38		6.46		6.64		11.01		5.23	May-18
Total Micro Cap	49,250,119	1.92	2.00	11.26	--	17.96	--	--	--	--	--	--	--	-0.26	Oct-18
BMO Micro Cap Equity	49,250,119	1.92		11.26	22	17.96	65	--	--	--	--	--	--	-0.26	Oct-18
Russell Microcap				13.45	4	22.43	43	6.39	31	6.57	71	11.26	62	-3.76	Oct-18
Over/Under				-2.19		-4.47		--		--		--		3.50	
eV US Micro Cap Value Equity Net Median				8.32		21.43		5.04		7.72		12.02		-1.28	Oct-18
Total International Equity	652,183,043	25.46	21.00	11.27	31	26.74	39	13.09	29	7.66	36	6.85	46	8.83	Jan-84
MSCI ACWI ex USA				8.92	72	21.51	70	9.87	64	5.51	69	4.97	84	--	Jan-84
Over/Under				2.35		5.23		3.22		2.15		1.88		--	
eV All ACWI ex-US Equity Net Median				10.06		24.82		11.16		6.40		6.81		--	Jan-84



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 Developed Int'l Equity	466,874,470	18.22	15.00	10.75	37	27.36	37	12.86	32	7.27	39	--	--	6.89	Jan-11
MSCI ACWI ex USA				8.92	72	21.51	70	9.87	64	5.51	69	4.97	84	4.30	Jan-11
Over/Under				1.83		5.85		2.99		1.76				2.59	
eV All ACWI ex-US Equity Net Median				10.06		24.82		11.16		6.40		6.81		5.82	Jan-11
Artisan Partner	109,060,746	4.26		7.96	90	29.59	24	15.09	14	6.02	59	7.72	30	7.16	Apr-05
MSCI ACWI ex USA				8.92	72	21.51	70	9.87	64	5.51	69	4.97	84	5.33	Apr-05
Over/Under				-0.96		8.08		5.22		0.51		2.75		1.83	
eV All ACWI ex-US Equity Net Median				10.06		24.82		11.16		6.40		6.81		6.35	Apr-05
William Blair International Growth	135,721,598	5.30		10.47	27	30.65	9	12.23	20	6.60	43	7.27	36	6.05	Apr-05
MSCI EAFE				8.17	70	22.01	52	9.56	48	5.67	58	5.50	79	4.94	Apr-05
Over/Under				2.30		8.64		2.67		0.93		1.77		1.11	
eV All EAFE Equity Net Median				9.00		22.07		9.31		6.10		6.69		5.65	Apr-05
UBS International	93,885,921	3.66		11.79	23	23.67	57	11.71	47	5.87	61	5.86	70	9.82	Jan-84
MSCI ACWI ex USA				8.92	72	21.51	70	9.87	64	5.51	69	4.97	84	--	Jan-84
Over/Under				2.87		2.16		1.84		0.36		0.89			
eV All ACWI ex-US Equity Net Median				10.06		24.82		11.16		6.40		6.81		--	Jan-84
Acadian	128,206,205	5.00		12.75	32	25.18	39	12.27	24	10.79	9	--	--	8.56	Jan-14
MSCI EAFE Small Cap				11.52	62	24.96	40	10.92	47	8.85	42	8.74	68	6.42	Jan-14
Over/Under				1.23		0.22		1.35		1.94				2.14	
eV EAFE Small Cap Equity Net Median				12.12		23.82		10.62		8.38		9.26		6.08	Jan-14



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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	185,308,574	7.23	6.00	12.61	27	25.35	26	13.54	31	7.03	25	--	--	6.81	Jan-14
<i>MSCI Emerging Markets</i>				<u>11.84</u>	42	<u>18.44</u>	66	<u>11.57</u>	58	<u>5.61</u>	58	<u>3.68</u>	73	<u>4.27</u>	<i>Jan-14</i>
Over/Under				0.77		6.91		1.97		1.42				2.54	
<i>eV Emg Mkts All Cap Equity Net Median</i>				11.51		21.02		12.06		5.88		4.30		4.60	<i>Jan-14</i>
EARNEST Partners	88,823,067	3.47		12.08	35	22.95	34	13.10	36	5.58	58	--	--	6.38	Jan-14
<i>MSCI Emerging Markets</i>				<u>11.84</u>	42	<u>18.44</u>	66	<u>11.57</u>	58	<u>5.61</u>	58	<u>3.68</u>	73	<u>4.27</u>	<i>Jan-14</i>
Over/Under				0.24		4.51		1.53		-0.03				2.11	
<i>eV Emg Mkts All Cap Equity Net Median</i>				11.51		21.02		12.06		5.88		4.30		4.60	<i>Jan-14</i>
Lazard	96,485,507	3.77		13.10	21	27.66	16	13.97	27	8.57	9	--	--	7.23	Jan-14
<i>MSCI Emerging Markets</i>				<u>11.84</u>	42	<u>18.44</u>	66	<u>11.57</u>	58	<u>5.61</u>	58	<u>3.68</u>	73	<u>4.27</u>	<i>Jan-14</i>
Over/Under				1.26		9.22		2.40		2.96				2.96	
<i>eV Emg Mkts All Cap Equity Net Median</i>				11.51		21.02		12.06		5.88		4.30		4.60	<i>Jan-14</i>
Long/Short Equities	85,347,797	3.33	3.00	2.50	68	10.94	61	--	--	--	--	--	--	3.59	Mar-18
<i>Long/Short Custom Index</i>				<u>0.46</u>	82	<u>2.26</u>	85	<u>1.65</u>	83	<u>1.05</u>	86	<u>0.56</u>	94	<u>2.13</u>	<i>Mar-18</i>
Over/Under				2.04		8.68								1.46	
<i>eV Alt Fundamental - Long/Short Equity Median</i>				4.69		13.87		6.69		5.64		7.06		3.29	<i>Mar-18</i>
UBS Bucktown CPD LLC	53,498,500	2.09		3.01	65	13.25	53	--	--	--	--	--	--	4.14	May-18
<i>Long/Short Custom Index</i>				<u>0.46</u>	82	<u>2.26</u>	85	<u>1.65</u>	83	<u>1.05</u>	86	<u>0.56</u>	94	<u>2.18</u>	<i>May-18</i>
Over/Under				2.55		10.99								1.96	
<i>eV Alt Fundamental - Long/Short Equity Median</i>				4.69		13.87		6.69		5.64		7.06		3.58	<i>May-18</i>
Pluscios L/S EQ FD	31,849,297	1.24		1.65	73	7.27	74	--	--	--	--	--	--	3.48	Apr-18
<i>Long/Short Custom Index</i>				<u>0.46</u>	82	<u>2.26</u>	85	<u>1.65</u>	83	<u>1.05</u>	86	<u>0.56</u>	94	<u>2.15</u>	<i>Apr-18</i>
Over/Under				1.19		5.01								1.33	
<i>eV Alt Fundamental - Long/Short Equity Median</i>				4.69		13.87		6.69		5.64		7.06		3.63	<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	535,519,824	20.90	22.00	0.20	83	7.12	57	3.61	60	2.81	60	4.10	48	7.08	Jan-84
BBgBarc US Aggregate TR				0.18	84	8.72	45	4.03	49	3.05	54	3.75	56	7.03	Jan-84
Over/Under				0.02		-1.60		-0.42		-0.24		0.35		0.05	
eV All US Fixed Inc Net Median				0.56		8.05		3.98		3.17		3.99		7.13	Jan-84
Core/Core Plus Fixed Income	396,493,284	15.48	16.00	0.07	67	9.18	42	4.22	41	3.35	31	--	--	3.94	Dec-10
BBgBarc US Aggregate TR				0.18	44	8.72	68	4.03	56	3.05	64	3.75	71	3.28	Dec-10
Over/Under				-0.11		0.46		0.19		0.30				0.66	
eV US Core Fixed Inc Net Median				0.15		8.96		4.09		3.14		3.97		3.50	Dec-10
LM	527,162	0.02		0.00	76	9.09	48	3.90	74	3.18	47	4.11	40	4.88	May-06
BBgBarc US Aggregate TR				0.18	44	8.72	68	4.03	56	3.05	64	3.75	71	4.45	May-06
Over/Under				-0.18		0.37		-0.13		0.13		0.36		0.43	
eV US Core Fixed Inc Net Median				0.15		8.96		4.09		3.14		3.97		4.61	May-06
Wellington	101,882,139	3.98		0.54	10	10.24	9	4.91	4	3.86	6	4.84	11	5.07	Dec-04
BBgBarc US Aggregate TR				0.18	44	8.72	68	4.03	56	3.05	64	3.75	71	4.19	Dec-04
Over/Under				0.36		1.52		0.88		0.81		1.09		0.88	
eV US Core Fixed Inc Net Median				0.15		8.96		4.09		3.14		3.97		4.33	Dec-04
Wells Capital	289,148	0.01		0.00	76	8.59	73	3.99	61	3.17	47	4.36	26	4.78	Mar-04
BBgBarc US Aggregate TR				0.18	44	8.72	68	4.03	56	3.05	64	3.75	71	4.08	Mar-04
Over/Under				-0.18		-0.13		-0.04		0.12		0.61		0.70	
eV US Core Fixed Inc Net Median				0.15		8.96		4.09		3.14		3.97		4.24	Mar-04
Earnest Partners	99,757,980	3.89		--	--	--	--	--	--	--	--	--	--	-0.71	Nov-19
BBgBarc US Aggregate TR				0.18	44	8.72	68	4.03	56	3.05	64	3.75	71	-0.12	Nov-19
Over/Under														-0.59	
eV US Core Fixed Inc Net Median				0.15		8.96		4.09		3.14		3.97		-0.13	Nov-19
Garcia Hamilton	100,099,594	3.91		--	--	--	--	--	--	--	--	--	--	-0.15	Nov-19
BBgBarc US Aggregate TR				0.18	44	8.72	68	4.03	56	3.05	64	3.75	71	-0.12	Nov-19
Over/Under														-0.03	
eV US Core Fixed Inc Net Median				0.15		8.96		4.09		3.14		3.97		-0.13	Nov-19
National Investment Services	93,937,259	3.67		--	--	--	--	--	--	--	--	--	--	0.47	Nov-19
BBgBarc US Aggregate TR				0.18	44	8.72	68	4.03	56	3.05	64	3.75	71	-0.12	Nov-19
Over/Under														0.59	
eV US Core Fixed Inc Net Median				0.15		8.96		4.09		3.14		3.97		-0.13	Nov-19

*Earnest Partners, Garcia Hamilton and National Investment Services were funded in November 2019, therefore three month performance is unavailable



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	22,843,263	0.89	3.00	1.07	81	10.46	19	3.90	56	--	--	--	--	3.13	Jun-15
BBgBarc Global Aggregate TR				0.48	97	6.84	54	4.27	43	2.31	74	2.48	96	3.12	Jun-15
Over/Under				0.59		3.62		-0.37						0.01	
eV Global Unconstrained Fixed Inc Net Median				2.23		7.27		3.99		3.09		3.30		3.19	Jun-15
Manulife Asset Management	22,843,263	0.89		1.07	81	10.46	19	3.90	56	--	--	--	--	3.13	Jun-15
BBgBarc Global Aggregate TR				0.48	97	6.84	54	4.27	43	2.31	74	2.48	96	3.12	Jun-15
Over/Under				0.59		3.62		-0.37						0.01	
eV Global Unconstrained Fixed Inc Net Median				2.23		7.27		3.99		3.09		3.30		3.19	Jun-15
Absolute Return Fixed Income	1,649,945	0.06	0.00	-2.18	99	3.20	93	2.42	88	--	--	--	--	2.00	Jun-15
3-Month LIBOR + 3%				1.23	78	5.42	72	5.07	32	4.46	11	3.90	37	4.57	Jun-15
Over/Under				-3.41		-2.22		-2.65						-2.57	
eV Global Unconstrained Fixed Inc Net Median				2.23		7.27		3.99		3.09		3.30		3.19	Jun-15
Mackay Shields	1,649,945	0.06		-2.18	99	3.20	93	2.42	88	--	--	--	--	2.00	Jun-15
3-Month LIBOR + 3%				1.23	78	5.42	72	5.07	32	4.46	11	3.90	37	4.57	Jun-15
Over/Under				-3.41		-2.22		-2.65						-2.57	
eV Global Unconstrained Fixed Inc Net Median				2.23		7.27		3.99		3.09		3.30		3.19	Jun-15
Short Duration	64,364,897	2.51	--	0.56	10	2.83	99	2.11	99	--	--	--	--	2.11	Jan-17
BBgBarc US Govt/Credit 1-3 Yr. TR				0.59	8	4.03	99	2.15	99	1.67	99	1.54	99	2.15	Jan-17
Over/Under				-0.03		-1.20		-0.04						-0.04	
eV US Core Fixed Inc Net Median				0.15		8.96		4.09		3.14		3.97		4.09	Jan-17
HGK Asset Management	64,364,897	2.51		0.56	41	2.83	99	2.11	76	--	--	--	--	2.11	Jan-17
BBgBarc US Govt/Credit 1-3 Yr. TR				0.59	30	4.03	68	2.15	74	1.67	72	1.54	79	2.15	Jan-17
Over/Under				-0.03		-1.20		-0.04						-0.04	
eV US Short Duration Fixed Inc Net Median				0.54		4.29		2.36		1.89		1.90		2.36	Jan-17
Emerging Market Debt	50,168,435	1.96	3.00	0.05	99	--	--	--	--	--	--	--	--	--	--
JP Morgan GBI - EM Global Diversified Index				5.20	20	13.47	59	7.03	26	2.78	83	2.71	79	--	
Over/Under				-5.15											
eV All Emg Mkts Fixed Inc Net Median				3.52		13.96		6.38		5.33		5.63		--	
Lazard EM Income Fund L	25,436,700	0.99		1.16	99	--	--	--	--	--	--	--	--	2.61	Mar-19
JP Morgan GBI - EM Global Diversified Index				5.20	20	13.47	59	7.03	26	2.78	83	2.71	79	8.79	Mar-19
Over/Under				-4.04										-6.18	
eV All Emg Mkts Fixed Inc Net Median				3.52		13.96		6.38		5.33		5.63		8.47	Mar-19
Blackrock EM Local Curr	24,731,735	0.97		-1.07	99	--	--	--	--	--	--	--	--	-1.07	Aug-19
JP Morgan GBI - EM Global Diversified Index				5.20	20	13.47	59	7.03	26	2.78	83	2.71	79	3.41	Aug-19
Over/Under				-6.27										-4.48	
eV All Emg Mkts Fixed Inc Net Median				3.52		13.96		6.38		5.33		5.63		2.39	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	23,516,693	0.92	5.00	-1.53	--	3.20	--	1.51	--	4.53	--	9.54	--	7.91	Oct-95
Cambridge Associates US All PE				0.00	--	9.90	--	12.58	--	11.26	--	13.37	--	14.17	Oct-95
Over/Under				-1.53	--	-6.70	--	-11.07	--	-6.73	--	-3.83	--	-6.26	
Adams Street Partners	2,950,857	0.12		-3.16	--	-10.20	--	-2.54	--	1.27	--	5.95	--	8.15	Oct-95
Invesco Vent Alpha Fund	20,552,714	0.80		-1.29	--	5.50	--	--	--	--	--	--	--	6.77	Jul-17
Total Infrastructure	76,884,846	3.00	4.00	2.84	--	10.21	--	20.26	--	21.61	--	16.79	--	9.24	Nov-07
NCREIF Property Index				1.55	--	6.42	--	6.70	--	8.25	--	10.17	--	6.35	Nov-07
Over/Under				1.29	--	3.79	--	13.56	--	13.36	--	6.62	--	2.89	
Global Infrastructure Partners	1,368,834	0.05		-5.29	--	202.92	--	74.05	--	64.52	--	37.90	--	26.45	Nov-07
Global Infrastructure Partners III	21,114,504	0.82		1.38	--	3.64	--	3.39	--	--	--	--	--	3.39	Jan-17
Ullico Infra Taxable	53,922,316	2.10		3.81	--	9.61	--	--	--	--	--	--	--	8.28	May-18
Global Infrastructure Partners IV	218,751	0.01		0.00	--	--	--	--	--	--	--	--	--	0.00	Jun-19
Total Real Estate	144,096,338	5.62	7.00	2.51	--	7.43	--	4.82	--	5.16	--	6.86	--	5.70	Oct-95
NCREIF Property Index 1 Qtr. Lag				1.41	--	6.23	--	6.76	--	8.57	--	9.77	--	9.39	Oct-95
Over/Under				1.10	--	1.20	--	-1.94	--	-3.41	--	-2.91	--	-3.69	
Private Real Estate	127,547,927	4.98	--	2.61	--	4.73	--	4.21	--	5.64	--	--	--	7.50	Dec-10
Sound Mark Partners LLC	17,823,446	0.70		1.93	--	8.44	--	--	--	--	--	--	--	6.06	Sep-17
Brookfield RE Fund B	4,361,263	0.17		0.49	--	6.61	--	--	--	--	--	--	--	6.64	Jul-17
UBS Realty Investors	14,242,062	0.56		0.54	--	-1.85	--	2.99	--	5.12	--	7.66	--	3.53	Jan-07
M.S. Prime Property	21,131,081	0.82		1.15	--	4.60	--	6.06	--	7.71	--	10.13	--	5.02	Dec-06
Mesirow RE Value	50,547	0.00		5,054,600.00	--	3,691,303.86	--	3,222.81	--	767.82	--	--	--	333.03	Jul-12
DRA Advisors	209,814	0.01		0.70	--	13.12	--	5.46	--	6.25	--	27.06	--	20.84	Oct-07
Morgan Stanley RE VI	647	0.00		7.73	--	14.14	--	12.59	--	8.67	--	9.87	--	-10.82	Jul-07
Lone Star X	12,862,997	0.50		2.44	--	8.21	--	--	--	--	--	--	--	-25.53	Dec-17
Lone Star Global	390,335	0.02		-3.49	--	-36.83	--	-14.13	--	-4.84	--	-0.55	--	-0.09	Aug-08
Lone Star Fund VI	1,515,293	0.06		11.05	--	12.46	--	4.66	--	0.66	--	6.77	--	7.03	Jul-08
Apollo Real Estate Advisors	177,268	0.01		-8.81	--	-18.24	--	-33.58	--	-23.15	--	-8.41	--	-14.78	May-08
AG Core Plus Realty II	400,182	0.02		-1.10	--	0.09	--	-8.79	--	-0.04	--	8.37	--	4.89	Aug-07
ABR Chesapeake III	1	0.00		14.93	--	-23.61	--	-7.24	--	-0.63	--	0.94	--	0.53	Sep-06
Mesirow FIN RE Val III	6,393,416	0.25		0.24	--	6.64	--	--	--	--	--	--	--	-0.77	May-18
Lone Star XI	688,576	0.03		-27.02	--	--	--	--	--	--	--	--	--	-31.22	Jun-19
Blackstone Property	30,634,157	1.20		2.11	--	--	--	--	--	--	--	--	--	2.11	Jun-19
Terracap IV Inst	16,664,059	0.65		11.09	--	--	--	--	--	--	--	--	--	11.09	Aug-19
NCREIF Property Index				1.55	--	6.42	--	6.70	--	8.25	--	10.17	--	2.98	Aug-19
Over/Under				9.54	--	--	--	--	--	--	--	--	--	8.11	



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
REIT	16,548,411	0.65	--	1.76	99	23.97	57	8.23	99	4.83	99	7.80	63	12.31	Dec-08
eV EAFE REIT Net Median				7.47		24.32		13.93		8.05		7.91		11.53	Dec-08
ING Clarion	16,548,411	0.65		1.76	99	23.97	57	8.23	99	4.83	99	7.80	63	12.31	Dec-08
NAREIT Equity Index				-0.76	99	26.00	32	8.14	99	7.21	99	11.94	1	14.77	Dec-08
Over/Under				2.52		-2.03		0.09		-2.38		-4.14		-2.46	
eV EAFE REIT Net Median				7.47		24.32		13.93		8.05		7.91		11.53	Dec-08
Total Hedge Funds	158,852,758	6.20	4.00	-0.94	96	0.35	97	3.42	74	--	--	--	--	4.10	Aug-16
HFRI Fund of Funds Composite Index				3.03	44	8.33	52	3.87	69	2.35	77	2.82	85	3.88	Aug-16
Over/Under				-3.97		-7.98		-0.45						0.22	
eV Alt Fund of Funds - Multi-Strategy Median				2.67		8.63		4.88		3.35		4.53		5.11	Aug-16
Pluscios	63,595,284	2.48		1.60	75	1.85	95	3.91	68	--	--	--	--	4.53	Aug-16
HFRI Fund of Funds Composite Index				3.03	44	8.33	52	3.87	69	2.35	77	2.82	85	3.88	Aug-16
Over/Under				-1.43		-6.48		0.04						0.65	
eV Alt Fund of Funds - Multi-Strategy Median				2.67		8.63		4.88		3.35		4.53		5.11	Aug-16
EnTrust Permal	54,755,985	2.14		-3.26	99	-2.27	99	--	--	--	--	--	--	3.16	Feb-17
HFRI Fund of Funds Composite Index				3.03	44	8.33	52	3.87	69	2.35	77	2.82	85	3.62	Feb-17
Over/Under				-6.29		-10.60								-0.46	
eV Alt Fund of Funds - Multi-Strategy Median				2.67		8.63		4.88		3.35		4.53		4.70	Feb-17
Blueprint Capital Advisors	40,501,488	1.58		-1.60	97	2.49	94	--	--	--	--	--	--	1.88	Aug-17
Blueprint Capital Custom Index				3.03	44	8.33	52	--	--	--	--	--	--	3.03	Aug-17
Over/Under				-4.63		-5.84								-1.15	
eV Alt Fund of Funds - Multi-Strategy Median				2.67		8.63		4.88		3.35		4.53		4.06	Aug-17
Total Global Asset Allocation	114,677,625	4.48	5.00	4.32	51	11.91	69	6.71	50	4.31	53	--	--	5.28	Dec-11
60% MSCI ACWI (Net) / 40% FTSE WGBI				5.16	36	18.17	32	9.23	22	6.02	26	6.18	41	6.70	Dec-11
Over/Under				-0.84		-6.26		-2.52		-1.71				-1.42	
eV Global TAA Net Median				4.37		15.72		6.67		4.57		5.92		5.90	Dec-11
PIMCO	114,677,625	4.48		4.32	51	12.14	65	6.63	52	4.58	50	--	--	5.02	Dec-11
PIMCO All Asset Index				1.86	85	11.31	72	5.14	74	4.29	53	5.05	70	4.38	Dec-11
Over/Under				2.46		0.83		1.49		0.29				0.64	
eV Global TAA Net Median				4.37		15.72		6.67		4.57		5.92		5.90	Dec-11



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
Opportunistic Credit	77,330,196	3.02	4.00	0.04	--	4.21	--	4.74	--	--	--	--	--	4.67	Nov-16
Opportunistic Credit Custom Index				2.17	--	11.38	--	5.41	--	--	--	--	--	5.55	Nov-16
Over/Under				-2.13		-7.17		-0.67						-0.88	
Beach Point LP	25,340,354	0.99		4.14	--	9.38	--	7.99	--	--	--	--	--	7.98	Dec-16
Voya	22,541,531	0.88		0.65	--	6.88	--	3.90	--	--	--	--	--	3.85	Nov-16
Eagle Point Credit Management	18,655,543	0.73		-6.54	--	-6.47	--	--	--	--	--	--	--	-2.47	Aug-18
Voya Bank Loan	10,792,768	0.42		1.72	--	7.93	--	--	--	--	--	--	--	7.93	Jan-19
Private Debt	80,847,140	3.16	4.00	1.74	--	9.38	--	9.16	--	--	--	--	--	7.83	Nov-16
Private Debt Custom Index				1.23	--	5.42	--	5.07	--	--	--	--	--	5.01	Nov-16
Over/Under				0.51		3.96		4.09						2.82	
Clareant Euro Dir	20,613,236	0.80		2.97	--	11.23	--	11.22	--	--	--	--	--	9.90	Nov-16
Dorchester Secondaries Offshore IV	16,916,642	0.66		-0.64	--	11.77	--	--	--	--	--	--	--	8.82	Mar-17
Monroe Capital (PE)	16,012,374	0.63		1.57	--	3.77	--	9.90	--	--	--	--	--	8.28	Nov-16
Crestline Opportunity FD III	17,543,365	0.68		2.67	--	9.85	--	--	--	--	--	--	--	7.84	Jun-17
Clareant Euro Dir III	2,529,283	0.10		0.00	--	0.00	--	--	--	--	--	--	--	0.00	Dec-18
Monroe Capital Private	7,232,240	0.28		2.71	--	11.05	--	--	--	--	--	--	--	9.42	Nov-18
Cash	20,607,106	0.80	0.00	0.53	--	2.26	--	1.73	--	1.18	--	--	--	0.79	Dec-10
91 Day T-Bills				0.39	--	2.07	--	1.64	--	1.05	--	0.56	--	0.60	Dec-10
Over/Under				0.14		0.19		0.09		0.13				0.19	
Cash	20,607,106	0.80		0.53	20	2.26	57	1.73	57	1.18	57	0.73	32	2.43	Sep-98
91 Day T-Bills				0.39	91	2.07	87	1.64	71	1.05	72	0.56	72	1.82	Sep-98
Over/Under				0.14		0.19		0.09		0.13		0.17		0.61	
Transitions	936,591	0.04	--	1.53	--	7.25	--	5.85	--	6.15	--	--	--	3.80	Jul-14
Tax Reclaims	936,591	0.04		1.53	--	7.25	--	5.85	--	6.15	--	--	--	3.80	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%

