

# Q1 2019 PERFORMANCE REPORT

## POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO



**May 28, 2019**

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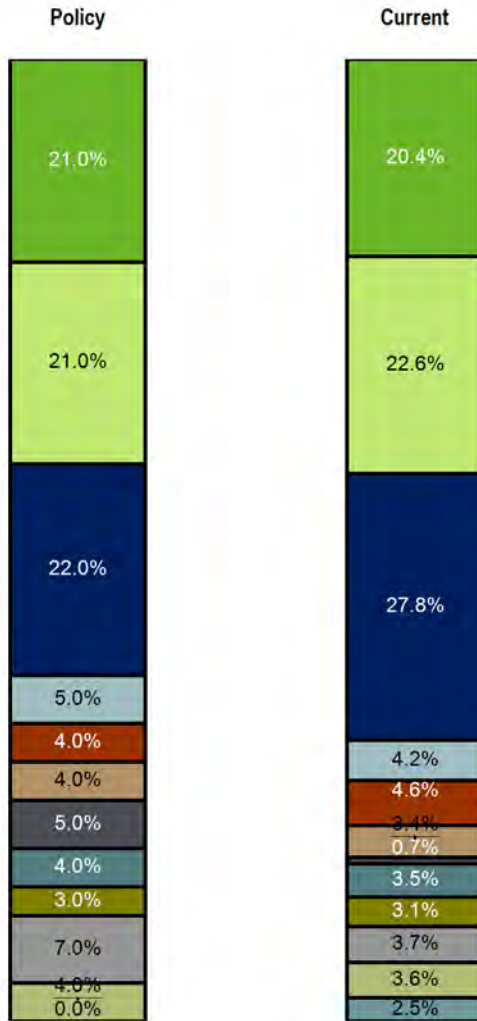
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## Chicago Police Annuity and Benefit Fund

# TOTAL PLAN ASSET ALLOCATION VS. POLICY TARGETS



Asset Allocation vs. Target				
	Current	Policy	Current	Difference*
U.S. Equity	\$528,342,151	21.00%	20.43%	-0.57%
Non-US Equity	\$583,436,390	21.00%	22.57%	1.57%
Fixed Income	\$717,597,964	22.00%	27.75%	5.75%
Global Asset Allocation	\$107,766,511	5.00%	4.17%	-0.83%
Opportunistic Credit	\$120,031,027	4.00%	4.64%	0.64%
Private Debt	\$86,830,548	4.00%	3.36%	-0.64%
Private Equity	\$17,424,021	5.00%	0.67%	-4.33%
Hedge Funds	\$89,269,472	4.00%	3.45%	-0.55%
Long/Short Equity	\$78,955,731	3.00%	3.05%	0.05%
Real Estate	\$96,751,785	7.00%	3.74%	-3.26%
Infrastructure	\$94,027,959	4.00%	3.64%	-0.36%
Cash	\$65,045,097	0.00%	2.52%	2.52%
<b>Total</b>	<b>\$2,585,478,655</b>	<b>100.00%</b>	<b>100.00%</b>	

\*Difference between Policy and Current Allocation



## Chicago Police Annuity and Benefit Fund

# TOTAL PLAN NET PERFORMANCE DETAIL

	Ending March 31, 2019														
	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Composite</b>	<b>2,585,478,655</b>	<b>100.00</b>	<b>100.00</b>	<b>7.24</b>	<b>84</b>	<b>1.28</b>	<b>96</b>	<b>7.76</b>	<b>66</b>	<b>5.63</b>	<b>55</b>	<b>9.73</b>	<b>38</b>	<b>8.46</b>	<b>Jan-84</b>
Allocation Index				7.44	79	2.28	90	7.43	82	5.52	60	9.87	33	--	Jan-84
Over/Under				-0.20		-1.00		0.33		0.11		-0.14			
Policy Index				6.78	91	3.93	49	8.16	47	5.47	62	9.13	62	--	Jan-84
InvestorForce Public DB Net Median				8.51		3.88		8.08		5.75		9.56		8.46	Jan-84
<b>Total Equity</b>	<b>1,190,734,272</b>	<b>46.05</b>	<b>45.00</b>	<b>11.88</b>	<b>58</b>	<b>-1.25</b>	<b>74</b>	<b>10.82</b>	<b>35</b>	<b>6.75</b>	<b>44</b>	<b>12.93</b>	<b>41</b>	<b>6.83</b>	<b>Oct-96</b>
MSCI ACWI				12.18	54	2.60	51	10.67	37	6.45	51	11.98	58	6.34	Oct-96
Over/Under				-0.30		-3.85		0.15		0.30		0.95		0.49	
eV All Global Equity Net Median				12.44		2.69		9.53		6.46		12.49		8.10	Oct-96
<b>Total Domestic Equity</b>	<b>528,342,151</b>	<b>20.43</b>	<b>21.00</b>	<b>13.07</b>	<b>60</b>	<b>4.42</b>	<b>55</b>	<b>12.17</b>	<b>45</b>	<b>9.36</b>	<b>36</b>	<b>15.41</b>	<b>51</b>	<b>10.66</b>	<b>Jan-84</b>
Russell 3000				14.04	47	8.77	32	13.48	32	10.35	25	16.00	39	10.86	Jan-84
Over/Under				-0.97		-4.35		-1.31		-0.99		-0.59		-0.20	
eV All US Equity Net Median				13.79		5.24		11.62		8.24		15.42		11.54	Jan-84
<b>Total Large Cap</b>	<b>292,074,597</b>	<b>11.30</b>	<b>15.00</b>	<b>11.73</b>	<b>70</b>	<b>4.89</b>	<b>63</b>	<b>10.89</b>	<b>65</b>	<b>9.05</b>	<b>55</b>	<b>14.85</b>	<b>51</b>	<b>8.74</b>	<b>Oct-95</b>
Russell 1000				14.00	38	9.30	35	13.52	31	10.63	31	16.05	26	9.11	Oct-95
Over/Under				-2.27		-4.41		-2.63		-1.58		-1.20		-0.37	
eV US Large Cap Equity Net Median				13.03		7.03		11.91		9.28		14.89		9.23	Oct-95
NTGI Russell 1000	195,437,390	7.56		14.04	37	9.26	35	13.50	32	10.67	30	--	--	12.65	Mar-12
Russell 1000				14.00	38	9.30	35	13.52	31	10.63	31	16.05	26	13.12	Mar-12
Over/Under				0.04		-0.04		-0.02		0.04				-0.47	
eV US Large Cap Equity Net Median				13.03		7.03		11.91		9.28		14.89		11.99	Mar-12
Great Lakes	96,481,761	3.73		11.06	62	1.69	70	9.00	76	7.35	52	14.15	44	10.13	Jul-89
S&P 500/Citi Pure Value				11.79	44	0.37	81	10.22	54	6.67	67	21.06	1	--	Jul-89
Over/Under				-0.73		1.32		-1.22		0.68		-6.91			
eV US Large Cap Value Equity Net Median				11.53		3.65		10.32		7.39		13.95		9.97	Jul-89

Denali Advisors and Montag & Caldwell were terminated in March 2019.

Policy Index: 15% Russell 1000, 6% Russell 2500, 2% MSCI EAFE, 6% MSCI Emerging Markets, 5% MSCI World ex USA Small Cap, 8% MSCI ACWI ex USA, 3% Citi 3mth Treasury Bill, 13% BBgBarc US Aggregate TR, 9% 3-Month LIBOR + 3%, 4% BBgBarc Global Aggregate TR, 4% NCREIF Property Index, 5% - 60% MSCI ACWI (Net) / 40% CITI WGBI, 1% NAREIT Equity Index, 5% Private Equity Benchmark (1 Qtr. Lag), 6% NCREIF Property (1 Qtr Lag), 4% HFRI Fund of Funds Composite Index, 4% 50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index.



## Chicago Police Annuity and Benefit Fund

# TOTAL PLAN NET PERFORMANCE DETAIL

Ending March 31, 2019																
	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date	
<b>Total SMID Cap</b>	<b>236,267,554</b>	<b>9.14</b>	<b>6.00</b>	<b>14.66</b>	<b>56</b>	<b>4.49</b>	<b>39</b>	<b>15.03</b>	<b>19</b>	<b>10.13</b>	<b>14</b>	<b>16.79</b>	<b>21</b>	<b>9.74</b>	<b>Nov-04</b>	
<i>Russell 2500</i>				<u>15.82</u>	43	<u>4.48</u>	39	<u>12.56</u>	41	<u>7.79</u>	41	<u>16.23</u>	32	<u>9.25</u>	<i>Nov-04</i>	
Over/Under				-1.16		0.01		2.47		2.34		0.56		0.49		
<i>eV US Small-Mid Cap Equity Net Median</i>				15.01		2.64		11.36		7.01		15.54		9.51	<i>Nov-04</i>	
<b>William Blair SMID Growth</b>	<b>75,090,869</b>	<b>2.90</b>		<b>16.76</b>	<b>64</b>	<b>8.54</b>	<b>56</b>	<b>17.66</b>	<b>35</b>	<b>12.30</b>	<b>12</b>	<b>18.04</b>	<b>14</b>	<b>11.18</b>	<b>Nov-04</b>	
<i>Russell 2500 Growth</i>				<u>18.99</u>	30	<u>7.54</u>	60	<u>15.60</u>	52	<u>9.72</u>	39	<u>17.50</u>	20	<u>10.29</u>	<i>Nov-04</i>	
Over/Under				-2.23		1.00		2.06		2.58		0.54		0.89		
<i>eV US Small-Mid Cap Growth Equity Net Median</i>				17.63		9.13		16.02		8.62		16.31		10.27	<i>Nov-04</i>	
<b>Fisher Investment</b>	<b>65,599,457</b>	<b>2.54</b>		<b>15.44</b>	<b>27</b>	<b>3.81</b>	<b>19</b>	<b>13.61</b>	<b>7</b>	<b>8.66</b>	<b>5</b>	--	--	<b>11.39</b>	<b>Feb-13</b>	
<i>Russell 2500 Value</i>				<u>13.12</u>	60	<u>1.84</u>	28	<u>9.85</u>	29	<u>6.02</u>	35	<u>15.03</u>	43	<u>9.30</u>	<i>Feb-13</i>	
Over/Under				2.32		1.97		3.76		2.64				2.09		
<i>eV US Small-Mid Cap Value Equity Net Median</i>				13.55		-0.85		8.53		5.37		14.63		9.29	<i>Feb-13</i>	
<b>Chicago Equity SMID Value</b>	<b>47,536,798</b>	<b>1.84</b>		<b>11.40</b>	<b>88</b>	--	--	--	--	--	--	--	--	<b>-3.21</b>	<b>May-18</b>	
<i>Russell 2500 Value</i>				<u>13.12</u>	60	<u>1.84</u>	28	<u>9.85</u>	29	<u>6.02</u>	35	<u>15.03</u>	43	<u>0.74</u>	<i>May-18</i>	
Over/Under				-1.72										-3.95		
<i>eV US Small-Mid Cap Value Equity Net Median</i>				13.55		-0.85		8.53		5.37		14.63		-1.27	<i>May-18</i>	
<b>BMO Micro Cap Equity</b>	<b>48,040,430</b>	<b>1.86</b>		<b>14.01</b>	<b>14</b>	--	--	--	--	--	--	--	--	<b>-3.66</b>	<b>Oct-18</b>	
<i>Russell Microcap</i>				<u>13.10</u>	29	<u>-2.36</u>	48	<u>12.29</u>	31	<u>5.03</u>	78	<u>14.97</u>	70	<u>-11.94</u>	<i>Oct-18</i>	
Over/Under				0.91										8.28		
<i>eV US Micro Cap Value Equity Net Median</i>				11.58		-2.87		11.24		7.12		15.40		-10.85	<i>Oct-18</i>	



## Chicago Police Annuity and Benefit Fund

# TOTAL PLAN NET PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	Ending March 31, 2019												Inception (%)	Inception Date
				3 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank				
<b>Total International Equity</b>	<b>583,436,390</b>	<b>22.57</b>	<b>21.00</b>	<b>11.76</b>	<b>40</b>	<b>-6.36</b>	<b>53</b>	<b>9.49</b>	<b>26</b>	<b>4.53</b>	<b>31</b>	<b>10.25</b>	<b>55</b>	<b>8.64</b>	<b>Jan-84</b>		
MSCI ACWI ex USA				10.31	66	-4.22	31	8.09	43	2.57	66	8.85	76	--	Jan-84		
Over/Under				1.45		-2.14		1.40		1.96		1.40					
eV All ACWI ex-US Equity Net Median				11.15		-5.94		7.73		3.25		10.59		--	Jan-84		
<b>Total Developed Int'l Equity</b>	<b>413,871,813</b>	<b>16.01</b>	<b>15.00</b>	<b>11.41</b>	<b>47</b>	<b>-6.26</b>	<b>51</b>	<b>8.29</b>	<b>40</b>	<b>4.05</b>	<b>38</b>	<b>--</b>	<b>--</b>	<b>5.81</b>	<b>Jan-11</b>		
MSCI ACWI ex USA				10.31	66	-4.22	31	8.09	43	2.57	66	8.85	76	3.48	Jan-11		
Over/Under				1.10		-2.04		0.20		1.48				2.33			
eV All ACWI ex-US Equity Net Median				11.15		-5.94		7.73		3.25		10.59		4.98	Jan-11		
Artisan Partner	93,926,547	3.63		10.33	66	-1.31	15	7.02	63	3.03	54	10.85	43	6.33	Apr-05		
MSCI ACWI ex USA				10.31	66	-4.22	31	8.09	43	2.57	66	8.85	76	4.89	Apr-05		
Over/Under				0.02		2.91		-1.07		0.46		2.00		1.44			
eV All ACWI ex-US Equity Net Median				11.15		-5.94		7.73		3.25		10.59		5.90	Apr-05		
William Blair International Growth	119,042,918	4.60		13.83	8	-5.55	51	7.34	43	3.33	43	10.11	47	5.34	Apr-05		
MSCI EAFE				9.98	54	-3.71	35	7.27	44	2.33	68	8.96	75	4.43	Apr-05		
Over/Under				3.85		-1.84		0.07		1.00		1.15		0.91			
eV All EAFE Equity Net Median				10.08		-5.48		6.99		2.97		9.94		5.26	Apr-05		
UBS International	85,684,331	3.31		10.81	57	-5.99	51	9.63	26	3.37	48	10.56	52	9.70	Jan-84		
MSCI ACWI ex USA				10.31	66	-4.22	31	8.09	43	2.57	66	8.85	76	--	Jan-84		
Over/Under				0.50		-1.77		1.54		0.80		1.71					
eV All ACWI ex-US Equity Net Median				11.15		-5.94		7.73		3.25		10.59		--	Jan-84		
Acadian	115,218,017	4.46		10.47	47	-11.66	49	10.15	19	6.47	10	--	--	7.27	Jan-14		
MSCI EAFE Small Cap				10.65	43	-9.36	27	7.50	52	4.47	53	12.76	74	4.91	Jan-14		
Over/Under				-0.18		-2.30		2.65		2.00				2.36			
eV EAFE Small Cap Equity Net Median				10.06		-11.89		7.59		4.69		14.05		5.02	Jan-14		



## Chicago Police Annuity and Benefit Fund

# TOTAL PLAN NET PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	Ending March 31, 2019										Inception (%)	Inception Date
				3 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank		
<b>Total Emerging Markets Equity</b>	<b>169,564,577</b>	<b>6.56</b>	<b>6.00</b>	<b>12.76</b>	<b>25</b>	<b>-6.77</b>	<b>41</b>	<b>12.45</b>	<b>25</b>	<b>4.28</b>	<b>40</b>	<b>--</b>	<b>--</b>	<b>5.67</b>	<b>Jan-14</b>
<i>MSCI Emerging Markets</i>				<u>9.93</u>	61	<u>-7.41</u>	45	<u>10.68</u>	52	<u>3.68</u>	55	<u>8.94</u>	65	<u>3.42</u>	<i>Jan-14</i>
Over/Under				2.83		0.64		1.77		0.60				2.25	
<i>eV Emg Mkts All Cap Equity Net Median</i>				10.67		-7.80		10.75		3.93		9.57		3.50	<i>Jan-14</i>
<b>EARNEST Partners</b>	<b>82,361,588</b>	<b>3.19</b>		<b>11.66</b>	<b>37</b>	<b>-4.21</b>	<b>15</b>	<b>11.66</b>	<b>33</b>	<b>3.60</b>	<b>56</b>	<b>--</b>	<b>--</b>	<b>5.37</b>	<b>Jan-14</b>
<i>MSCI Emerging Markets</i>				<u>9.93</u>	61	<u>-7.41</u>	45	<u>10.68</u>	52	<u>3.68</u>	55	<u>8.94</u>	65	<u>3.42</u>	<i>Jan-14</i>
Over/Under				1.73		3.20		0.98		-0.08				1.95	
<i>eV Emg Mkts All Cap Equity Net Median</i>				10.67		-7.80		10.75		3.93		9.57		3.50	<i>Jan-14</i>
<b>Lazard</b>	<b>87,202,989</b>	<b>3.37</b>		<b>13.82</b>	<b>15</b>	<b>-9.07</b>	<b>62</b>	<b>13.26</b>	<b>16</b>	<b>4.99</b>	<b>24</b>	<b>--</b>	<b>--</b>	<b>5.98</b>	<b>Jan-14</b>
<i>MSCI Emerging Markets</i>				<u>9.93</u>	61	<u>-7.41</u>	45	<u>10.68</u>	52	<u>3.68</u>	55	<u>8.94</u>	65	<u>3.42</u>	<i>Jan-14</i>
Over/Under				3.89		-1.66		2.58		1.31				2.56	
<i>eV Emg Mkts All Cap Equity Net Median</i>				10.67		-7.80		10.75		3.93		9.57		3.50	<i>Jan-14</i>
<b>Long/Short Equities</b>	<b>78,955,731</b>	<b>3.05</b>	<b>3.00</b>	<b>2.63</b>	<b>77</b>	<b>-1.31</b>	<b>55</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>-1.21</b>	<b>Mar-18</b>
<i>Long/Short Custom Index</i>				<u>0.60</u>	86	<u>2.11</u>	40	<u>1.17</u>	86	<u>0.72</u>	82	<u>0.41</u>	97	<u>2.07</u>	<i>Mar-18</i>
Over/Under				2.03		-3.42								-3.28	
<i>eV Alt Fundamental - Long/Short Equity Median</i>				7.09		0.00		7.01		4.46		9.39		-0.97	<i>Mar-18</i>
<b>UBS Bucktown CPD LLC</b>	<b>48,559,000</b>	<b>1.88</b>		<b>2.80</b>	<b>77</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>-2.88</b>	<b>May-18</b>
<i>Long/Short Custom Index</i>				<u>0.60</u>	86	<u>2.11</u>	40	<u>1.17</u>	86	<u>0.72</u>	82	<u>0.41</u>	97	<u>1.98</u>	<i>May-18</i>
Over/Under				2.20										-4.86	
<i>eV Alt Fundamental - Long/Short Equity Median</i>				7.09		0.00		7.01		4.46		9.39		-0.72	<i>May-18</i>
<b>Pluscios L/S EQ FD</b>	<b>30,396,731</b>	<b>1.18</b>		<b>2.38</b>	<b>78</b>	<b>1.32</b>	<b>43</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.32</b>	<b>Apr-18</b>
<i>Long/Short Custom Index</i>				<u>0.60</u>	86	<u>2.11</u>	40	<u>1.17</u>	86	<u>0.72</u>	82	<u>0.41</u>	97	<u>2.11</u>	<i>Apr-18</i>
Over/Under				1.78		-0.79								-0.79	
<i>eV Alt Fundamental - Long/Short Equity Median</i>				7.09		0.00		7.01		4.46		9.39		0.00	<i>Apr-18</i>

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



## Chicago Police Annuity and Benefit Fund

# TOTAL PLAN NET PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	Ending March 31, 2019												Inception (%)	Inception Date
				3 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank				
<b>Total Fixed Income</b>	<b>717,597,964</b>	<b>27.75</b>	<b>22.00</b>	<b>3.00</b>	<b>53</b>	<b>3.47</b>	<b>70</b>	<b>2.88</b>	<b>44</b>	<b>2.78</b>	<b>51</b>	<b>4.83</b>	<b>44</b>	<b>7.12</b>	<b>Jan-84</b>		
BBgBarc US Aggregate TR				2.94	54	4.48	38	2.03	62	2.74	53	3.77	60	7.02	Jan-84		
Over/Under				0.06		-1.01		0.85		0.04		1.06		0.10			
eV All US Fixed Inc Net Median				3.09		4.20		2.50		2.81		4.37		7.36	Jan-84		
<b>Core Fixed Income</b>	<b>285,892,844</b>	<b>11.06</b>	<b>13.00</b>	<b>3.47</b>	<b>18</b>	<b>4.47</b>	<b>42</b>	<b>2.61</b>	<b>25</b>	<b>3.04</b>	<b>26</b>	<b>--</b>	<b>--</b>	<b>3.63</b>	<b>Dec-10</b>		
BBgBarc US Aggregate TR				2.94	73	4.48	41	2.03	64	2.74	58	3.77	80	2.91	Dec-10		
Over/Under				0.53		-0.01		0.58		0.30		0.72		0.72			
eV US Core Fixed Inc Net Median				3.18		4.38		2.18		2.78		4.32		3.14	Dec-10		
LM	90,495,648	3.50		3.66	12	4.16	75	2.22	49	2.87	39	4.66	33	4.75	May-06		
BBgBarc US Aggregate TR				2.94	73	4.48	41	2.03	64	2.74	58	3.77	80	4.27	May-06		
Over/Under				0.72		-0.32		0.19		0.13		0.89		0.48			
eV US Core Fixed Inc Net Median				3.18		4.38		2.18		2.78		4.32		4.46	May-06		
Wellington	98,219,314	3.80		3.71	11	4.63	28	3.48	6	3.34	11	6.08	6	4.89	Dec-04		
BBgBarc US Aggregate TR				2.94	73	4.48	41	2.03	64	2.74	58	3.77	80	4.02	Dec-04		
Over/Under				0.77		0.15		1.45		0.60		2.31		0.87			
eV US Core Fixed Inc Net Median				3.18		4.38		2.18		2.78		4.32		4.17	Dec-04		
Wells Capital	97,177,883	3.76		3.05	65	4.48	41	2.26	47	2.95	34	4.75	29	4.66	Mar-04		
BBgBarc US Aggregate TR				2.94	73	4.48	41	2.03	64	2.74	58	3.77	80	3.92	Mar-04		
Over/Under				0.11		0.00		0.23		0.21		0.98		0.74			
eV US Core Fixed Inc Net Median				3.18		4.38		2.18		2.78		4.32		4.07	Mar-04		
<b>Diversified Fixed Income</b>	<b>29,155,350</b>	<b>1.13</b>	<b>2.00</b>	<b>1.19</b>	<b>87</b>	<b>0.90</b>	<b>66</b>	<b>3.70</b>	<b>63</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.18</b>	<b>Jun-15</b>		
3-Month LIBOR + 3%				1.42	86	5.65	3	4.70	53	4.15	11	3.77	94	4.42	Jun-15		
Over/Under				-0.23		-4.75		-1.00						-2.24			
eV Global Unconstrained Fixed Inc Net Median				2.80		1.76		4.82		2.67		5.48		2.72	Jun-15		
GAM Unconstrained Bond Fund	29,155,350	1.13		1.19	87	0.90	66	3.70	63	--	--	--	--	2.18	Jun-15		
3-Month LIBOR + 3%				1.42	86	5.65	3	4.70	53	4.15	11	3.77	94	4.42	Jun-15		
Over/Under				-0.23		-4.75		-1.00						-2.24			
eV Global Unconstrained Fixed Inc Net Median				2.80		1.76		4.82		2.67		5.48		2.72	Jun-15		



## Chicago Police Annuity and Benefit Fund

# TOTAL PLAN NET PERFORMANCE DETAIL

Ending March 31, 2019															
	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Global Multi Sector Fixed Income</b>	<b>80,045,296</b>	<b>3.10</b>	<b>4.00</b>	<b>4.14</b>	<b>26</b>	<b>1.83</b>	<b>48</b>	<b>2.34</b>	<b>77</b>	--	--	--	--	<b>2.17</b>	<b>Jun-15</b>
<i>BBgBarc Global Aggregate TR</i>				<u>2.20</u>	67	<u>-0.39</u>	74	<u>1.49</u>	90	<u>1.04</u>	88	<u>3.05</u>	99	<u>2.55</u>	<i>Jun-15</i>
Over/Under				1.94		2.22		0.85						-0.38	
<i>eV Global Unconstrained Fixed Inc Net Median</i>				2.80		1.76		4.82		2.67		5.48		2.72	<i>Jun-15</i>
<b>Manulife Asset Management</b>	<b>80,045,296</b>	<b>3.10</b>		<b>4.14</b>	<b>26</b>	<b>1.83</b>	<b>48</b>	<b>2.34</b>	<b>77</b>	--	--	--	--	<b>2.17</b>	<b>Jun-15</b>
<i>BBgBarc Global Aggregate TR</i>				<u>2.20</u>	67	<u>-0.39</u>	74	<u>1.49</u>	90	<u>1.04</u>	88	<u>3.05</u>	99	<u>2.55</u>	<i>Jun-15</i>
Over/Under				1.94		2.22		0.85						-0.38	
<i>eV Global Unconstrained Fixed Inc Net Median</i>				2.80		1.76		4.82		2.67		5.48		2.72	<i>Jun-15</i>
<b>Absolute Return Fixed Income</b>	<b>46,807,193</b>	<b>1.81</b>	<b>3.00</b>	<b>2.83</b>	<b>49</b>	<b>2.77</b>	<b>36</b>	<b>3.93</b>	<b>62</b>	--	--	--	--	<b>2.30</b>	<b>Jun-15</b>
<i>3-Month LIBOR + 3%</i>				<u>1.42</u>	86	<u>5.65</u>	3	<u>4.70</u>	53	<u>4.15</u>	11	<u>3.77</u>	94	<u>4.42</u>	<i>Jun-15</i>
Over/Under				1.41		-2.88		-0.77						-2.12	
<i>eV Global Unconstrained Fixed Inc Net Median</i>				2.80		1.76		4.82		2.67		5.48		2.72	<i>Jun-15</i>
<b>Mackay Shields</b>	<b>46,807,193</b>	<b>1.81</b>		<b>2.83</b>	<b>49</b>	<b>2.77</b>	<b>36</b>	<b>3.93</b>	<b>62</b>	--	--	--	--	<b>2.30</b>	<b>Jun-15</b>
<i>3-Month LIBOR + 3%</i>				<u>1.42</u>	86	<u>5.65</u>	3	<u>4.70</u>	53	<u>4.15</u>	11	<u>3.77</u>	94	<u>4.42</u>	<i>Jun-15</i>
Over/Under				1.41		-2.88		-0.77						-2.12	
<i>eV Global Unconstrained Fixed Inc Net Median</i>				2.80		1.76		4.82		2.67		5.48		2.72	<i>Jun-15</i>
<b>Short Duration</b>	<b>250,907,281</b>	<b>9.70</b>	--	<b>0.96</b>	<b>99</b>	<b>2.89</b>	<b>98</b>	--	--	--	--	--	--	<b>2.00</b>	<b>Jan-17</b>
<i>BBgBarc US Govt/Credit 1-3 Yr. TR</i>				<u>1.21</u>	99	<u>3.03</u>	97	<u>1.32</u>	97	<u>1.22</u>	99	<u>1.59</u>	99	<u>1.62</u>	<i>Jan-17</i>
Over/Under				-0.25		-0.14								0.38	
<i>eV US Core Fixed Inc Net Median</i>				3.18		4.38		2.18		2.78		4.32		2.95	<i>Jan-17</i>
<b>HGK Asset Management</b>	<b>250,907,281</b>	<b>9.70</b>		<b>0.96</b>	<b>93</b>	<b>2.89</b>	<b>74</b>	--	--	--	--	--	--	<b>2.00</b>	<b>Jan-17</b>
<i>BBgBarc US Govt/Credit 1-3 Yr. TR</i>				<u>1.21</u>	72	<u>3.03</u>	57	<u>1.32</u>	71	<u>1.22</u>	75	<u>1.59</u>	78	<u>1.62</u>	<i>Jan-17</i>
Over/Under				-0.25		-0.14								0.38	
<i>eV US Short Duration Fixed Inc Net Median</i>				1.44		3.10		1.55		1.44		2.13		1.87	<i>Jan-17</i>
<b>Emerging Market Debt</b>	<b>24,790,000</b>	<b>0.96</b>	--	--	--	--	--	--	--	--	--	--	--	--	
<i>Lazard EM Income Fund L</i>	24,790,000	0.96		--	--	--	--	--	--	--	--	--	--	<b>0.00</b>	<i>Mar-19</i>
<i>JP Morgan GBI - EM Global Diversified Index</i>				<u>2.92</u>	--	<u>-7.58</u>	--	<u>3.27</u>	--	<u>-0.76</u>	--	<u>4.38</u>	--	<u>-1.33</u>	<i>Mar-19</i>
Over/Under														1.33	





## Chicago Police Annuity and Benefit Fund

# TOTAL PLAN NET PERFORMANCE DETAIL

	Ending March 31, 2019														
	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Total Private Equity</b>	<b>17,424,021</b>	<b>0.67</b>	<b>5.00</b>	<b>-6.96</b>	--	<b>3.40</b>	--	<b>0.42</b>	--	<b>4.99</b>	--	<b>6.62</b>	--	<b>7.69</b>	<b>Oct-95</b>
Private Equity Benchmark (1 Qtr. Lag)				-2.08	--	9.98	--	13.52	--	11.40	--	10.63	--	16.83	Oct-95
Over/Under				-4.88		-6.58		-13.10		-6.41		-4.01		-9.14	
Adams Street Partners	3,552,392	0.14		-8.17	--	0.19	--	0.00	--	2.74	--	6.83	--	8.52	Oct-95
Invesco Vent Alpha Fund	13,857,474	0.54		-6.94	--	4.65	--	--	--	--	--	--	--	2.22	Jul-17
<b>Total Infrastructure</b>	<b>94,027,959</b>	<b>3.64</b>	<b>4.00</b>	<b>0.78</b>	--	<b>6.68</b>	--	<b>22.30</b>	--	<b>22.29</b>	--	<b>15.67</b>	--	<b>9.03</b>	<b>Nov-07</b>
NCREIF Property Index				1.80	--	6.82	--	7.07	--	9.12	--	8.50	--	6.37	Nov-07
Over/Under				-1.02		-0.14		15.23		13.17		7.17		2.66	
Global Infrastructure Partners	22,640,847	0.88		14.10	--	19.36	--	37.04	--	38.86	--	25.30	--	17.89	Nov-07
Global Infrastructure Partners III	18,402,816	0.71		-8.33	--	3.72	--	--	--	--	--	--	--	-1.00	Jan-17
Ullico Infra Taxable	51,864,369	2.01		-0.42	--	--	--	--	--	--	--	--	--	3.73	May-18
<b>Total Real Estate</b>	<b>96,751,785</b>	<b>3.74</b>	<b>7.00</b>	<b>2.38</b>	--	<b>5.79</b>	--	<b>3.74</b>	--	<b>5.89</b>	--	<b>6.34</b>	--	<b>5.67</b>	<b>Oct-95</b>
NCREIF Property Index 1 Qtr. Lag				1.37	--	6.71	--	7.22	--	9.33	--	7.49	--	9.48	Oct-95
Over/Under				1.01		-0.92		-3.48		-3.44		-1.15		-3.81	
<b>Private Real Estate</b>	<b>81,045,977</b>	<b>3.13</b>	--	<b>0.11</b>	--	<b>4.83</b>	--	<b>3.66</b>	--	<b>6.86</b>	--	--	--	<b>7.62</b>	<b>Dec-10</b>
Sound Mark Partners LLC	17,548,790	0.68		0.02	--	5.16	--	--	--	--	--	--	--	3.64	Sep-17
Brookfield RE Fund B	3,686,811	0.14		1.73	--	8.95	--	--	--	--	--	--	--	6.73	Jul-17
UBS Realty Investors	19,209,067	0.74		1.50	--	6.52	--	5.93	--	7.47	--	6.30	--	4.04	Jan-07
M.S. Prime Property	20,754,868	0.80		0.90	--	7.76	--	7.53	--	9.56	--	6.57	--	5.03	Dec-06
Mesirow RE Value	607,584	0.02		-16.69	--	-24.20	--	-4.93	--	3.44	--	--	--	4.44	Jul-12
DRA Advisors	393,271	0.02		1.55	--	2.99	--	3.80	--	44.63	--	24.86	--	21.20	Oct-07
Morgan Stanley RE VI	240,823	0.01		5.84	--	7.73	--	9.72	--	8.05	--	-3.84	--	-12.04	Jul-07
Lone Star X	11,157,553	0.43		1.32	--	19.38	--	--	--	--	--	--	--	-39.95	Dec-17
Lone Star Global	401,144	0.02		-35.08	--	-34.44	--	-15.76	--	-4.32	--	0.84	--	0.16	Aug-08
Lone Star Fund VI	1,736,998	0.07		0.35	--	-0.29	--	1.05	--	4.54	--	7.02	--	6.41	Jul-08
Apollo Real Estate Advisors	170,151	0.01		-21.53	--	-70.69	--	-34.76	--	-22.60	--	-8.93	--	-16.03	May-08
AG Core Plus Realty II	461,414	0.02		1.54	--	3.75	--	-7.41	--	5.63	--	6.45	--	5.34	Aug-07
ABR Chesapeake III	246,692	0.01		-10.75	--	12.93	--	-2.71	--	2.60	--	1.96	--	1.82	Sep-06
Mesirow FIN RE Val III	4,424,158	0.17		-0.54	--	--	--	--	--	--	--	--	--	-7.94	May-18



## Chicago Police Annuity and Benefit Fund

# TOTAL PLAN NET PERFORMANCE DETAIL

Ending March 31, 2019															
	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>REIT</b>	<b>15,705,808</b>	<b>0.61</b>	<b>--</b>	<b>15.38</b>	<b>1</b>	<b>11.13</b>	<b>1</b>	<b>4.55</b>	<b>99</b>	<b>5.45</b>	<b>99</b>	<b>13.35</b>	<b>32</b>	<b>12.48</b>	<b>Dec-08</b>
<i>eV EAFE REIT Net Median</i>				14.19		8.99		8.42		7.18		12.99		10.97	Dec-08
ING Clarion	15,705,808	0.61		15.38	1	11.13	1	4.55	99	5.45	99	13.35	32	12.48	Dec-08
<i>NAREIT Equity Index</i>				16.33	1	20.34	1	5.97	99	9.03	1	18.23	1	14.98	Dec-08
<i>Over/Under</i>				-0.95		-9.21		-1.42		-3.58		-4.88		-2.50	
<i>eV EAFE REIT Net Median</i>				14.19		8.99		8.42		7.18		12.99		10.97	Dec-08
<b>Total Hedge Funds</b>	<b>129,627,955</b>	<b>5.01</b>	<b>4.00</b>	<b>-0.70</b>	<b>99</b>	<b>1.53</b>	<b>47</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4.87</b>	<b>Aug-16</b>
<i>HFRI Fund of Funds Composite Index</i>				4.63	53	0.16	65	3.94	69	2.20	67	3.55	89	3.64	Aug-16
<i>Over/Under</i>				-5.33		1.37								1.23	
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>				4.82		1.41		5.18		3.23		5.79		4.85	Aug-16
Pluscios	33,214,755	1.28		1.27	93	1.96	41	--	--	--	--	--	--	5.61	Aug-16
<i>HFRI Fund of Funds Composite Index</i>				4.63	53	0.16	65	3.94	69	2.20	67	3.55	89	3.64	Aug-16
<i>Over/Under</i>				-3.36		1.80								1.97	
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>				4.82		1.41		5.18		3.23		5.79		4.85	Aug-16
EnTrust Permal	56,054,717	2.17		0.05	98	4.47	16	--	--	--	--	--	--	5.42	Feb-17
<i>HFRI Fund of Funds Composite Index</i>				4.63	53	0.16	65	3.94	69	2.20	67	3.55	89	3.24	Feb-17
<i>Over/Under</i>				-4.58		4.31								2.18	
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>				4.82		1.41		5.18		3.23		5.79		4.08	Feb-17
Blueprint Capital Advisors	40,358,482	1.56		-3.30	99	-3.19	87	--	--	--	--	--	--	-0.78	Aug-17
<i>Blueprint Capital Custom Index</i>				4.63	53	0.16	65	--	--	--	--	--	--	2.27	Aug-17
<i>Over/Under</i>				-7.93		-3.35								-3.05	
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>				4.82		1.41		5.18		3.23		5.79		3.00	Aug-17



## Chicago Police Annuity and Benefit Fund

# TOTAL PLAN NET PERFORMANCE DETAIL

Ending March 31, 2019															
	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Total Global Asset Allocation</b>	<b>107,766,511</b>	<b>4.17</b>	<b>5.00</b>	<b>5.16</b>	<b>74</b>	<b>-0.65</b>	<b>59</b>	<b>6.29</b>	<b>36</b>	<b>2.83</b>	<b>61</b>	<b>--</b>	<b>--</b>	<b>4.94</b>	<b>Dec-11</b>
60% MSCI ACWI (Net) / 40% FTSE WGBI				7.95	51	1.17	47	6.83	35	4.24	36	8.21	44	6.09	Dec-11
Over/Under				-2.79		-1.82		-0.54		-1.41				-1.15	
eV Global TAA Net Median				8.10		0.78		5.38		3.01		7.81		5.22	Dec-11
<b>PIMCO</b>	<b>107,766,511</b>	<b>4.17</b>		<b>5.38</b>	<b>71</b>	<b>-0.22</b>	<b>56</b>	<b>7.05</b>	<b>32</b>	<b>2.95</b>	<b>53</b>	<b>--</b>	<b>--</b>	<b>4.65</b>	<b>Dec-11</b>
PIMCO All Asset Index				4.63	79	4.53	11	3.90	64	3.61	42	5.85	68	3.96	Dec-11
Over/Under				0.75		-4.75		3.15		-0.66				0.69	
eV Global TAA Net Median				8.10		0.78		5.38		3.01		7.81		5.22	Dec-11
<b>Opportunistic Credit</b>	<b>79,672,544</b>	<b>3.08</b>	<b>4.00</b>	<b>1.99</b>	<b>--</b>	<b>3.63</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>5.22</b>	<b>Nov-16</b>
Opportunistic Credit Custom Index				5.54	--	4.85	--	6.82	--	--	--	--	--	4.97	Nov-16
Over/Under				-3.55		-1.22		--		--	--	--	--	0.25	
Beach Point LP	23,278,767	0.90		0.48	--	3.09	--	--	--	--	--	--	--	6.72	Dec-16
Opportunistic Credit Custom Index				5.54	--	4.85	--	6.82	--	--	--	--	--	5.19	Dec-16
Over/Under				-5.06		-1.76		--		--	--	--	--	1.53	
Voya	21,608,860	0.84		2.46	--	2.57	--	--	--	--	--	--	--	3.25	Nov-16
Opportunistic Credit Custom Index				5.54	--	4.85	--	6.82	--	--	--	--	--	4.97	Nov-16
Over/Under				-3.08		-2.28		--		--	--	--	--	-1.72	
Eagle Point Credit Management	20,489,913	0.79		2.73	--	--	--	--	--	--	--	--	--	6.00	Aug-18
Opportunistic Credit Custom Index				5.54	--	4.85	--	6.82	--	--	--	--	--	3.11	Aug-18
Over/Under				-2.81		--		--		--	--	--	--	2.89	
Monroe Capital Private	3,927,300	0.15		0.01	--	--	--	--	--	--	--	--	--	0.03	Nov-18
Opportunistic Credit Custom Index				5.54	--	4.85	--	6.82	--	--	--	--	--	2.63	Nov-18
Over/Under				-5.53		--		--		--	--	--	--	-2.60	
Voya Bank Loan	10,367,704	0.40		3.68	--	--	--	--	--	--	--	--	--	3.68	Jan-19
Opportunistic Credit Custom Index				5.54	--	4.85	--	6.82	--	--	--	--	--	5.54	Jan-19
Over/Under				-1.86		--		--		--	--	--	--	-1.86	

\*Opportunistic Credit Custom Index: 50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index.



## Chicago Police Annuity and Benefit Fund

# TOTAL PLAN NET PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	Ending March 31, 2019										Inception (%)	Inception Date
				3 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank		
<b>Private Debt</b>	<b>86,830,548</b>	<b>3.36</b>	<b>4.00</b>	<b>0.60</b>	--	<b>8.98</b>	--	--	--	--	--	--	--	<b>6.64</b>	<b>Nov-16</b>
<i>Private Debt Custom Index</i>				<u>1.42</u>	--	<u>5.65</u>	--	<u>4.70</u>	--	--	--	--	--	<u>4.92</u>	<i>Nov-16</i>
Over/Under				-0.82		3.33								1.72	
Clareant Euro Dir	19,768,914	0.76		1.56	--	9.40	--	--	--	--	--	--	--	8.99	Nov-16
Dorchester Secondaries Offshore IV	28,433,753	1.10		0.05	--	10.31	--	--	--	--	--	--	--	6.37	Mar-17
Monroe Capital (PE)	20,950,602	0.81		0.19	--	6.54	--	--	--	--	--	--	--	9.39	Nov-16
Crestline Opportunity FD III	15,647,129	0.61		0.97	--	9.14	--	--	--	--	--	--	--	6.22	Jun-17
Clareant Euro Dir III	2,030,150	0.08		0.00	--	--	--	--	--	--	--	--	--	0.00	Dec-18
<b>Cash</b>	<b>63,905,145</b>	<b>2.47</b>	<b>0.10</b>	<b>0.61</b>	--	<b>2.16</b>	--	<b>1.33</b>	--	<b>0.86</b>	--	--	--	<b>0.66</b>	<b>Dec-10</b>
<i>91 Day T-Bills</i>				<u>0.59</u>	--	<u>2.15</u>	--	<u>1.23</u>	--	<u>0.76</u>	--	<u>0.42</u>	--	<u>0.48</u>	<i>Dec-10</i>
Over/Under				0.02		0.01		0.10		0.10		0.10		0.18	
Cash	63,905,145	2.47		0.61	62	2.16	61	1.33	52	0.86	59	0.59	21	2.43	Sep-98
<i>91 Day T-Bills</i>				<u>0.59</u>	66	<u>2.15</u>	62	<u>1.23</u>	76	<u>0.76</u>	76	<u>0.42</u>	72	<u>1.82</u>	<i>Sep-98</i>
Over/Under				0.02		0.01		0.10		0.10		0.17		0.61	
<b>Transitions</b>	<b>1,139,952</b>	<b>0.04</b>	--	<b>2.63</b>	--	<b>3.87</b>	--	<b>7.28</b>	--	--	--	--	--	<b>3.45</b>	<b>Jul-14</b>
Tax Reclaims	1,139,952	0.04		2.63	--	3.87	--	7.28	--	--	--	--	--	3.45	Jul-14

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

