

September 30, 2022

Third Quarter Performance Report

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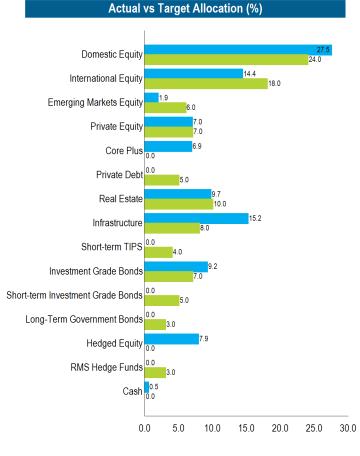
Agenda

# Agenda

- **1.** Third Quarter Performance Report
  - Pension Plan Performance Update as of September 30, 2022
- 2. Disclaimer, Glossary, and Notes

Interim Performance Report As of September 30, 2022

# Park Employees' Annuity & Benefit Fund of Chicago Pension Plan



	Allocation	vs. Target	s and Poli	су		
	Current Balance	Current Allocation	Policy	Difference	Policy Range	Within IPS Range?
Growth Assets	\$162,448,755	50.7%	55.0%	-4.3%	40.0% - 80.0%	Yes
Domestic Equity	\$88,004,756	27.5%	24.0%	3.5%	18.0% - 30.0%	Yes
International Equity	\$46,065,676	14.4%	18.0%	-3.6%	12.0% - 24.0%	Yes
Emerging Markets Equity	\$6,097,684	1.9%	6.0%	-4.1%	1.0% - 10.0%	Yes
Private Equity	\$22,280,638	7.0%	7.0%	0.0%	5.0% - 10.0%	Yes
Credit	\$21,953,132	6.9%	5.0%	1.9%	0.0% - 10.0%	Yes
Core Plus	\$21,953,132	6.9%	0.0%	6.9%	0.0% - 8.0%	Yes
Private Debt	\$0	0.0%	5.0%	-5.0%	0.0% - 7.0%	Yes
Inflation Hedges	\$79,609,891	24.9%	22.0%	2.9%	10.0% - 30.0%	Yes
Real Estate	\$31,080,256	9.7%	10.0%	-0.3%	6.0% - 16.0%	Yes
Infrastructure	\$48,529,635	15.2%	8.0%	7.2%	4.0% - 12.0%	No
Short-term TIPS	\$0	0.0%	4.0%	-4.0%	0.0% - 6.0%	Yes
Risk Mitigating Strategies	\$56,130,954	17.5%	18.0%	-0.5%	10.0% - 30.0%	Yes
Investment Grade Bonds	\$29,432,962	9.2%	7.0%	2.2%	4.0% - 10.0%	Yes
Short-term Investment Grade Bonds	\$0	0.0%	5.0%	-5.0%	0.0% - 8.0%	Yes
Long-Term Government Bonds	\$0	0.0%	3.0%	-3.0%	0.0% - 6.0%	Yes
Hedged Equity	\$25,160,325	7.9%	0.0%	7.9%	0.0% - 9.0%	Yes
RMS Hedge Funds	\$0	0.0%	3.0%	-3.0%	0.0% - 6.0%	Yes
Cash	\$1,537,668	0.5%	0.0%	0.5%	0.0% - 5.0%	Yes
Total	\$320,142,732	100.0%	100.0%			

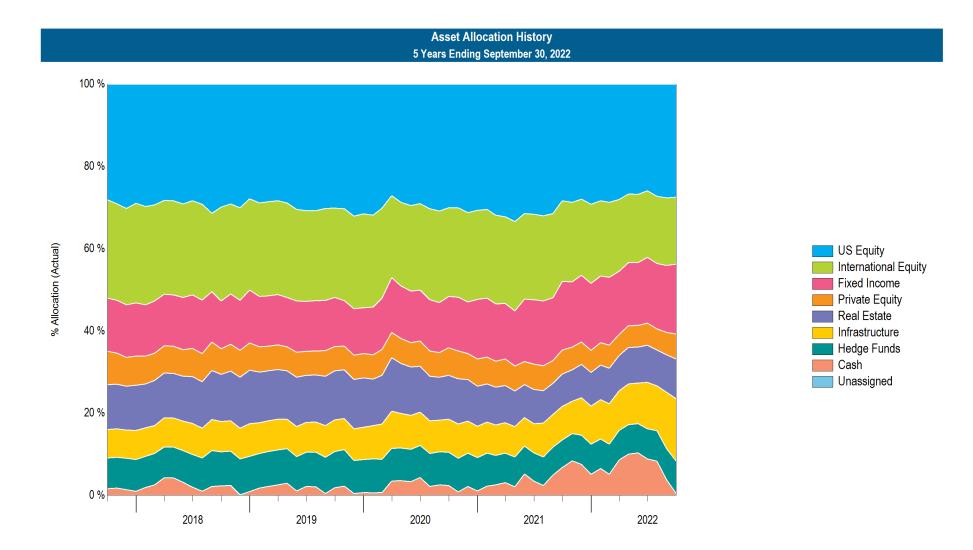
### Fund Summary | As of September 30, 2022

Asset Class Performance Summary (Net of Fees)											
	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Total Fund	320,142,732	100.0	-5.6	-4.2	-15.6	-12.5	4.1	4.2	6.8	6.2	Nov-03
Policy Benchmark			-5.5	-4.2	-14.2	-10.2	5.4	5.5	6.7	6.4	Nov-03
InvMetrics Public DB Net Rank			18	43	16	24	34	64	34	44	Nov-03
Growth Assets	162,448,755	50.7	-9.0	-6.6	-25.5	-21.8	3.9	3.8	7.6	8.3	Nov-03
Domestic Equity	88,004,756	27.5	-9.8	-5.6	-24.2	-18.8	6.4	6.0	10.0	7.1	Jun-07
Russell 3000			-9.3	-4.5	-24.6	-17.6	7.7	8.6	11.4	7.7	Jun-07
InvMetrics Public DB US Eq Net Rank			97	97	62	77	71	95	77	57	Jun-07
International Equity	46,065,676	14.4	-10.1	-9.7	-32.3	-30.9	-2.6	-1.9	3.2	0.9	Jun-07
MSCI EAFE			-9.4	-9.4	-27.1	-25.1	-1.8	-0.8	3.7	0.7	Jun-07
InvMetrics Public DB ex-US Eq Net Rank			72	34	98	96	80	78	59	72	Jun-07
Emerging Markets Equity	6,097,684	1.9	-11.6	-12.2	-27.5	-28.2	-2.5	-2.1		-0.2	May-15
MSCI Emerging Markets			-11.7	-11.6	-27.2	-28.1	-2.1	-1.8	1.0	0.0	May-15
Private Equity	22,280,638	7.0	-2.0	-2.0	-11.9	-8.5	14.3	11.7	12.1	11.8	Nov-03
Prequin Real Time			0.0	0.0	0.1	7.2	22.0	18.2	16.1		Nov-03
Total Credit	21,953,132	6.9	-5.2	-5.1	-16.5	-16.5	-2.0	0.4	1.4	4.2	Aug-01
Core Plus	21,953,132	6.9	-5.2	-5.1	-16.5	-16.5	-2.0	0.4	1.4	4.2	Aug-01
Bloomberg US Aggregate TR			-4.3	-4.8	-14.6	-14.6	-3.3	-0.3	0.9	3.4	Aug-01
Total Inflation Hedges	79,609,891	24.9	0.4	0.4	7.4	13.5	8.7	8.6	9.7	6.0	Jun-07
Real Estate	31,080,256	9.7	0.8	0.8	12.1	18.5	9.8	8.1	9.4	5.7	Jun-07
NCREIF ODCE Equal Weighted (Net)			0.8	0.8	13.3	21.7	12.1	9.9	10.3	6.0	Jun-07
InvMetrics All DB Real Estate Priv Net Rank			21	29	42	66	73	73	54	46	Jun-07
Infrastructure	48,529,635	15.2	0.1	0.1	3.5	7.1	7.0	9.3		9.2	Mar-15
CPI + 3%			0.5	0.9	8.7	11.2	8.0	6.8	5.5	6.1	Mar-15
Preqin Infrastructure 2Q Lagged			0.0	0.0	6.6	11.9	9.0	9.5	9.8	9.4	Mar-15

Private Equity market values are lagged by a quarter and adjusted for interim cash flows.

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Total Risk Mitigating Strategies	56,130,954	17.5	-3.9	-3.4	-9.8	-8.1	1.0	2.3	2.7	10.0	Jun-07
Investment Grade Bonds	29,432,962	9.2	-4.1	-4.2	-13.4	-13.5	-2.1	0.2	1.3	2.4	Sep-09
Bloomberg US Aggregate TR			-4.3	-4.8	-14.6	-14.6	-3.3	-0.3	0.9	2.1	Sep-09
Hedged Equity	25,160,325	7.9	-5.6	-3.5	-13.4	-8.3	3.7	4.4	5.1	3.9	Jul-08
HFRX Equity Hedge Index			-2.0	-0.1	-4.8	-2.3	4.7	2.8	3.2	0.5	Jul-08
InvMetrics Public DB Hedge Funds Net Rank			88	85	76	54	56	29	15	9	Jul-08
Cash	1,537,668	0.5	0.0	0.0	0.1	0.6	0.6	1.0	2.5	18.9	Jun-07





Trailing Net Performance												
	Market Value (\$) F	% of Portfolio S	% of Sector	1 Mo (%)	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Total Fund	320,142,732	100.0		-5.6	-4.2	-15.6	-12.5	4.1	4.2	6.8	6.2	Nov-03
Policy Benchmark				-5.5	-4.2	-14.2	-10.2	5.4	5.5	6.7	6.4	Nov-03
InvMetrics Public DB Net Rank				18	43	16	24	34	64	34	44	Nov-03
Growth Assets	162,448,755	50.7	50.7	-9.0	-6.6	-25.5	-21.8	3.9	3.8	7.6	8.3	Nov-03
Domestic Equity	88,004,756	27.5	54.2	-9.8	-5.6	-24.2	-18.8	6.4	6.0	10.0	7.1	Jun-07
Russell 3000				-9.3	-4.5	-24.6	-17.6	7.7	8.б	11.4	7.7	Jun-07
InvMetrics Public DB US Eq Net Rank				97	97	62	77	71	95	77	57	Jun-07
Northern Trust Wilshire 5000	37,841,255	11.8	43.0	-9.3	-4.6	-24.9	-18.0	7.5	8.5	11.3	7.9	Jun-07
FT Wilshire 5000 Total Market				-9.3	-4.4	-24.4	-17.2	8.1	8.8	11.5	8.0	Jun-07
Dow Jones U.S. Total Stock Market				-9.3	-4.6	-24.9	-18.1	7.5	8.5	11.3	7.9	Jun-07
eV US All Cap Core Equity Net Rank				62	48	50	47	38	40	25	26	Jun-07
Great Lakes	17,115,148	5.3	19.4	-8.6	-7.0	-16.3	-11.2	4.1	3.8	9.0	5.7	Jun-07
Russell 1000 Value				-8.8	-5.6	-17.8	-11.4	4.4	5.3	9.2	5.6	Jun-07
eV US Large Cap Value Equity Net Rank				58	80	45	62	79	90	67	73	Jun-07
NTGI S&P 400	9,633,407	3.0	10.9	-9.2	-2.5	-21.5	-15.2	6.0	5.9		6.4	May-17
S&P 400 MidCap				-9.2	-2.5	-21.5	-15.2	6.0	5.8	10.0	6.4	May-17
eV US Mid Cap Core Equity Net Rank				64	23	40	45	44	63		67	May-17
Ariel	23,414,946	7.3	26.6	-11.6	-7.5	-29.1	-25.8	5.0	4.4	9.3	5.9	Jun-07
Russell 2500 Value				-10.1	-4.5	-20.4	-15.4	4.5	3.8	8.4	5.8	Jun-07
eV US Small-Mid Cap Value Equity Net Rank				97	90	98	99	56	48	32	60	Jun-07

	Market Value (\$) P	% of ortfolio \$	% of Sector	1 Mo (%)	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
International Equity	46,065,676	14.4	28.4	-10.1	-9.7	-32.3	-30.9	-2.6	-1.9	3.2	0.9	Jun-07
MSCI EAFE				-9.4	-9.4	-27.1	-25.1	-1.8	-0.8	3.7	0.7	Jun-07
InvMetrics Public DB ex-US Eq Net Rank				72	34	98	96	80	78	59	72	Jun-07
NTGI ACWI ex US	21,154,093	6.6	45.9	-10.0	-10.6	-26.7	-25.0	-1.5	-0.7	3.2	1.4	Mar-08
MSCI ACWI ex USA				-10.0	-9.9	-26.5	-25.2	-1.5	-0.8	3.0	1.1	Mar-08
eV ACWI ex-US Core Equity Net Rank				63	79	31	34	70	65	78	79	Mar-08
Ativo International Equity ex US	13,280,604	4.1	28.8	-9.8	-10.4	-28.7	-24.9	-3.9			-2.6	Sep-18
MSCI EAFE				-9.4	-9.4	-27.1	-25.1	-1.8	-0.8	3.7	-1.5	Sep-18
eV EAFE Large Cap Core Net Rank				78	76	70	44	96			79	Sep-18
William Blair	11,630,980	3.6	25.2	-10.8	-7.0	-43.1	-43.1	-2.1	-2.6	3.7	4.8	Dec-11
MSCI EAFE Small Cap				-11.5	-9.8	-32.1	-32.1	-2.2	-1.8	5.3	6.1	Dec-11
MSCI ACWI ex US Small Cap				-11.0	-8.4	-29.4	-28.9	0.4	-0.6	4.4	5.3	Dec-11
Foreign Small/Mid Growth MStar MF Rank				52	9	77	86	47	72	83	86	Dec-11
Emerging Markets Equity	6,097,684	1.9	3.8	-11.6	-12.2	-27.5	-28.2	-2.5	-2.1		-0.2	May-15
MSCI Emerging Markets				-11.7	-11.6	-27.2	-28.1	-2.1	-1.8	1.0	0.0	May-15
Northern Trust Emerging Markets Index	6,097,684	1.9	100.0	-11.6	-12.2	-27.5	-28.2	-2.5	-2.1		-0.2	May-15
MSCI Emerging Markets				-11.7	-11.6	-27.2	-28.1	-2.1	-1.8	1.0	0.0	May-15
eV Emg Mkts Equity Net Rank				83	82	53	53	67	61	-	76	May-15

	Market Value (\$)	% of Portfolio		1 Mo (%)	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%) S.I. Date
Private Equity	22,280,638	7.0	13.7	-2.0	-2.0	-11.9	-8.5	14.3	11.7	12.1	11.8 Nov-03
Prequin Real Time				0.0	0.0	0.1	7.2	22.0	18.2	16.1	Nov-03
HarbourVest 2017 Global Fund, L.P.	6,643,108	2.1	29.8								
HarbourVest Partners VII-Buyout Partnership Fund, L.P.	62,401	0.0	0.3								
HarbourVest Partners VII-Mezzanine and Distressed Debt Fund, L.P.	25,619	0.0	0.1								
HarbourVest Partners VII-Venture Partnership Fund, L.P.	167,958	0.1	0.8								
Mesirow Financial Private Equity Partnership Fund III, L.P.	492,828	0.2	2.2								
Mesirow Financial Private Equity Partnership Fund IV, L.P.	1,863,131	0.6	8.4								
Mesirow Financial Capital Partners IX, L.P.	58,540	0.0	0.3								
Mesirow Financial Private Equity Fund VII-A, L.p.	8,992,211	2.8	40.4								
NYLCAP Select Manager Fund, L.P.	110,560	0.0	0.5								
PineBridge PEP V Europe, L.P.	842,098	0.3	3.8								
Entrust Global Recovery Fund, L.P.	3,022,184	0.9	13.6								

Fund Summary | As of September 30, 2022

HarbourVest 2017 Global Fund, HarbourVest VII Buyout, HarbourVest VII Mezzanine and Distressed Debt, HarbourVest VII Venture Partnership, Mesirow, and Entrust Global Recovery Fundmarket value is based on 06/30/2022 market values and adjusted for cash flows through the date of this report. Pinebridge market value is based on 03/31/22 data and adjusted for cash flows through the date of this report. Entrust market value is based on an estimate as of September 30, 2022.

	Market Value (\$) F	% of Portfolio	% of Sector	1 Mo (%)	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Total Credit	21,953,132	6.9	6.9	-5.2	-5.1	-16.5	-16.5	-2.0	0.4	1.4	4.2	Aug-01
Core Plus	21,953,132	6.9	100.0	-5.2	-5.1	-16.5	-16.5	-2.0	0.4	1.4	4.2	Aug-01
Bloomberg US Aggregate TR				-4.3	-4.8	-14.6	-14.6	-3.3	-0.3	0.9	3.4	Aug-01
MacKay Shields	21,953,132	6.9	100.0	-5.2	-5.1	-16.5	-16.5	-2.1	0.4	1.4	4.2	Aug-01
Bloomberg US Aggregate TR				-4.3	-4.8	-14.6	-14.6	-3.3	-0.3	0.9	3.4	Aug-01
eV US Core Fixed Inc Net Rank				98	93	96	96	10	15	20	6	Aug-01
Total Inflation Hedges	79,609,891	24.9	24.9	0.4	0.4	7.4	13.5	8.7	8.6	9.7	6.0	Jun-07
Real Estate	31,080,256	9.7	39.0	0.8	0.8	12.1	18.5	9.8	8.1	9.4	5.7	Jun-07
NCREIF ODCE Equal Weighted (Net)				0.8	0.8	13.3	21.7	12.1	9.9	10.3	6.0	Jun-07
InvMetrics All DB Real Estate Priv Net Rank				21	29	42	66	73	73	54	46	Jun-07
Trumbull Property Fund	11,117,637	3.5	35.8	-0.2	-0.2	10.9	16.3	6.7	5.1	6.7	4.5	Jun-07
NCREIF ODCE Equal Weighted (Net)				0.8	0.8	13.3	21.7	12.1	9.9	10.3	6.0	Jun-07
Trumbull Income Fund	603,228	0.2	1.9	0.3	0.3	6.7	12.2	7.4	6.9	7.7	6.2	Jun-07
NCREIF ODCE Equal Weighted (Net)				0.8	0.8	13.3	21.7	12.1	9.9	10.3	6.0	Jun-07
Principal Enhanced Property Fund	19,359,391	6.0	62.3	1.4	1.4	13.9	26.6	14.2	11.7	13.3	6.3	Jun-08
NCREIF ODCE Equal Weighted (Net)				0.8	0.8	13.3	21.7	12.1	9.9	10.3	5.9	Jun-08

### Fund Summary | As of September 30, 2022

	Market Value (\$) F	% of Portfolio S	% of Sector	1 Mo (%)	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Infrastructure	48,529,635	15.2	61.0	0.1	0.1	3.5	7.1	7.0	9.3		9.2	Mar-15
CPI + 3%				0.5	0.9	8.7	11.2	8.0	6.8	5.5	6.1	Mar-15
Preqin Infrastructure 2Q Lagged				0.0	0.0	6.6	11.9	9.0	9.5	9.8	9.4	Mar-15
Ullico Infrastructure	29,328,453	9.2	60.4	0.0	0.0	3.0	6.5	4.5	6.7		7.3	Mar-15
CPI + 3%				0.5	0.9	8.7	11.2	8.0	6.8	5.5	6.1	Mar-15
Preqin Infrastructure 2Q Lagged				0.0	0.0	6.6	11.9	9.0	9.5	9.8	9.4	Mar-15
IFM Global Infrastructure (U.S.)	19,201,182	6.0	39.6	0.3	0.2	4.0	7.8	9.8	12.2		11.7	May-15
CPI + 3%				0.5	0.9	8.7	11.2	8.0	6.8	5.5	6.1	May-15
Preqin Infrastructure 2Q Lagged				0.0	0.0	6.6	11.9	9.0	9.5	9.8	9.6	May-15
Total Risk Mitigating Strategies	56,130,954	17.5	17.5	-3.9	-3.4	-9.8	-8.1	1.0	2.3	2.7	10.0	Jun-07
Investment Grade Bonds	29,432,962	9.2	52.4	-4.1	-4.2	-13.4	-13.5	-2.1	0.2	1.3	2.4	Sep-09
Bloomberg US Aggregate TR				-4.3	-4.8	-14.6	-14.6	-3.3	-0.3	0.9	2.1	Sep-09
LM Capital	22,850,517	7.1	77.6	-4.2	-4.4	-13.4	-13.4	-2.2	0.2	1.3	2.4	Sep-09
Bloomberg US Aggregate TR				-4.3	-4.8	-14.6	-14.6	-3.3	-0.3	0.9	2.1	Sep-09
eV US Core Fixed Inc Net Rank				34	32	16	15	14	27	30	50	Sep-09
NIS Dynamic Fixed Income	6,582,445	2.1	22.4	-3.8	-3.7	-13.6	-13.6				-7.8	Dec-20
Bloomberg US Aggregate TR				-4.3	-4.8	-14.6	-14.6	-3.3	-0.3	0.9	-9.4	Dec-20
Bloomberg US Universal TR				-4.3	-4.5	-14.9	-14.9	-3.1	-0.2	1.2	-9.4	Dec-20
eV US Core Plus Fixed Inc Net Rank				10	15	14	14				14	Dec-20

Ullico market value is as of June 30, 2022. LM Capital returns are reported gross of fees.

#### Market Value % of % of QTD YTD 1 Yr 3 Yrs 5 Yrs 10 Yrs 1 Mo S.I. S.I. Date (%) (\$) Portfolio Sector (%) (%) (%) (%) (%) (%) (%) **Hedged Equity** 7.9 Jul-08 25,160,325 44.8 -5.6 -3.5 -13.4 -8.3 3.7 4.4 5.1 3.9 HFRX Equity Hedge Index -2.0 -2.3 3.2 0.5 Jul-08 -0.1 -4.8 4.7 2.8 InvMetrics Public DB Hedge Funds Net Rank 9 88 85 76 54 56 29 15 Jul-08 Parametric 25,160,325 7.9 100.0 -5.6 -3.5 -13.4 -8.3 3.7 5.1 Jan-17 4.4 ---HFRX Equity Hedge Index -2.0 -0.1 -4.8 -2.3 4.7 2.8 3.2 3.6 Jan-17 S&P 500 -9.2 -4.9 -23.9 -15.5 8.2 9.2 11.7 10.3 Jan-17 Cash 1,537,668 0.5 0.0 0.0 0.1 0.6 0.6 1.0 18.9 Jun-07 2.7 2.5

Calendar Year Performance											
	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	
Total Fund	14.8	10.1	17.2	-5.2	14.4	8.4	2.0	7.3	17.6	11.3	
Policy Benchmark	15.1	12.8	17.6	<i>-3.7</i>	13.9	7.1	1.0	6.6	13.7	10.7	
InvMetrics Public DB Net Rank	32	85	81	75	56	21	4	9	22	60	
Growth Assets	21.0	14.0	24.8	-11.0	19.3	8.6	1.5	7.4	24.6	14.5	
Domestic Equity	27.5	14.3	28.8	-11.5	18.1	14.0	-0.4	11.6	35.8	16.0	
Russell 3000	25.7	20.9	31.0	-5.2	21.1	12.7	0.5	12.6	33.6	16.4	
InvMetrics Public DB US Eq Net Rank	29	87	83	99	91	25	57	30	17	47	
Northern Trust Wilshire 5000	25.7	20.7	31.0	-5.3	21.2	12.8	0.5	12.5	33.5	17.0	
FT Wilshire 5000 Total Market	26.7	20.8	31.0	-5.3	21.0	13.4	0.7	12.7	33.1	16.1	
Dow Jones U.S. Total Stock Market	25.7	20.8	30.9	-5.3	21.2	12.6	0.4	12.5	33.5	16.4	
eV US All Cap Core Equity Net Rank	53	44	43	40	42	22	34	25	41	25	
Great Lakes	21.4	0.9	27.9	-12.4	17.6	16.0	-1.0	11.0	34.4	15.3	
Russell 1000 Value	25.2	2.8	26.5	-8.3	13.7	17.3	-3.8	13.5	32.5	17.5	
eV US Large Cap Value Equity Net Rank	89	70	36	78	40	28	28	58	42	50	
NTGI S&P 400	24.8	13.7	26.3	-11.0							
S&P 400 MidCap	24.8	13.7	26.2	-11.1	16.2	20.7	-2.2	9.8	33.5	17.9	
eV US Mid Cap Core Equity Net Rank	59	51	78	51							
Ariel	33.7	11.5	26.5	-14.2	15.5	12.4	-1.5	12.9	41.2	18.6	
Russell 2500 Value	27.8	4.9	23.6	-12.4	10.4	25.2	-5.5	7.1	33.3	19.2	
eV US Small-Mid Cap Value Equity Net Rank	15	20	46	53	27	91	25	6	13	17	

	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)
International Equity	9.9	12.3	24.2	-16.5	28.4	9.7	-4.9	-4.9	17.7	17.3
MSCI EAFE	11.3	7.8	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3
InvMetrics Public DB ex-US Eq Net Rank	19	49	18	75	48	2	68	77	42	66
NTGI ACWI ex US	7.9	11.0	21.7	-13.7	27.2	4.8	-5.4	-3.7	15.6	17.2
MSCI ACWI ex USA	7.8	10.7	21.5	-14.2	27.2	4.5	-5.7	-3.9	15.3	16.8
eV ACWI ex-US Core Equity Net Rank	74	61	64	29	68	22	84	54	89	59
Ativo International Equity ex US	15.3	-0.8	24.2							
MSCI EAFE	11.3	7.8	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3
eV EAFE Large Cap Core Net Rank	17	93	35							
William Blair	11.3	29.2	34.3	-24.2	32.7	-4.3	10.0	-7.9	26.5	21.4
MSCI EAFE Small Cap	10.1	12.3	25.0	-17.9	33.0	2.2	9.6	-4.9	29.3	20.0
MSCI ACWI ex US Small Cap	12.9	14.2	22.4	-18.2	31.6	3.9	2.6	-4.0	19.7	18.5
Foreign Small/Mid Growth MStar MF Rank	53	36	10	86	74	57	39	75	56	69
Emerging Markets Equity	-3.1	18.1	18.4	-14.7	36.9	11.1				
MSCI Emerging Markets	-2.5	18.3	18.4	-14.6	37.3	11.2	-14.9	-2.2	-2.6	<i>18.2</i>
Northern Trust Emerging Markets Index	-3.1	18.1	18.4	-14.7	37.0	11.1				
MSCI Emerging Markets	-2.5	18.3	18.4	-14.6	37.3	11.2	-14.9	-2.2	-2.6	<i>18.2</i>
eV Emg Mkts Equity Net Rank	67	50	58	33	52	35				

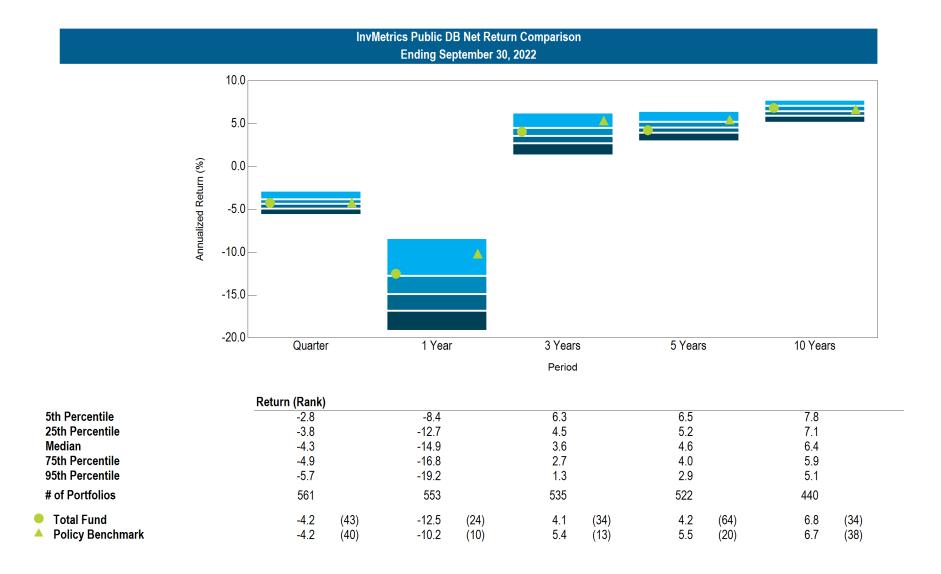


	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)
Private Equity	34.3	22.3	9.8	4.8	14.9	6.1	10.7	14.8	18.4	8.7
Prequin Real Time	38.1	25.6	15.2	10.9	19.2	10.5	10.7	12.1	19.5	13.1
HarbourVest 2017 Global Fund, L.P.										
HarbourVest Partners VII-Buyout Partnership Fund, L.P.										
HarbourVest Partners VII-Mezzanine and Distressed Debt Fund, L.P.										
HarbourVest Partners VII-Venture Partnership Fund, L.P.										
Mesirow Financial Private Equity Partnership Fund III, L.P.										
Mesirow Financial Private Equity Partnership Fund IV, L.P.										
Mesirow Financial Capital Partners IX, L.P.										
Mesirow Financial Private Equity Fund VII-A, L.p.										
NYLCAP Select Manager Fund, L.P.										
PineBridge PEP V Europe, L.P.										
Entrust Global Recovery Fund, L.P.										
Total Credit	-0.8	13.4	8.8	-0.6	4.0	3.3	0.2	5.9	-1.3	6.6
Core Plus	-0.8	13.4	8.8	-0.6	4.0	3.3	0.2	5.9	-1.3	6.6
Bloomberg US Aggregate TR	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2
MacKay Shields	-0.9	13.4	8.8	-0.6	4.0	3.3	0.2	5.9	-1.3	6.6
Bloomberg US Aggregate TR	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2
eV US Core Fixed Inc Net Rank	22	1	61	77	37	44	75	41	29	34

	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)
Total Inflation Hedges	16.9	0.0	6.3	10.7	8.3	9.2	12.6	11.5	11.9	10.6
Real Estate	17.9	-1.2	3.1	7.5	6.4	8.9	14.3	11.5	12.0	10.6
NCREIF ODCE Equal Weighted (Net)	21.9	0.8	5.2	7.3	6.9	8.3	14.2	11.4	12.4	9.9
InvMetrics All DB Real Estate Priv Net Rank	69	85	85	41	54	14	36	50	51	42
Trumbull Property Fund	15.2	-4.7	-3.0	6.0	5.3	5.7	11.8	10.3	9.2	8.9
NCREIF ODCE Equal Weighted (Net)	21.9	0.8	5.2	7.3	6.9	8.3	14.2	11.4	12.4	9.9
Trumbull Income Fund	14.5	0.1	5.1	6.8	4.5	7.6	10.2	10.3	8.5	10.3
NCREIF ODCE Equal Weighted (Net)	21.9	0.8	5.2	7.3	6.9	8.3	14.2	11.4	12.4	9.9
Principal Enhanced Property Fund	26.6	0.7	6.8	9.5	9.3	13.5	20.3	13.8	17.9	12.6
NCREIF ODCE Equal Weighted (Net)	21.9	0.8	5.2	7.3	6.9	8.3	14.2	11.4	12.4	9.9
Infrastructure	13.2	1.0	10.9	15.3	10.9	9.2				
CPI + 3%	10.0	4.4	5.3	4.9	5.1	5.1	3.7	3.8	4.5	4.7
Pregin Infrastructure 2Q Lagged	13.7	3.9	11.7	8.9	10.1	10.4	9.4	12.5	9.7	8.6
Ullico Infrastructure	9.4	-0.7	7.7	12.8	7.2	8.3				
CPI + 3%	10.0	4.4	5.3	4.9	5.1	5.1	3.7	3.8	4.5	4.7
Preqin Infrastructure 2Q Lagged	13.7	3.9	11.7	8.9	10.1	10.4	9.4	12.5	9.7	8.6
IFM Global Infrastructure (U.S.)	17.7	2.8	14.6	18.2	14.7	10.1				
CPI + 3%	10.0	4.4	5.3	4.9	5.1	5.1	3.7	3.8	4.5	4.7
Preqin Infrastructure 2Q Lagged	13.7	3.9	11.7	8.9	10.1	10.4	9.4	12.5	9.7	8.6

	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)
Total Risk Mitigating Strategies	6.1	4.8	12.1	-2.0	6.0	1.8	1.4	5.1	-0.1	8.9
Investment Grade Bonds	-0.7	9.0	9.0	-1.2	3.7	2.8	1.3	5.8	-1.8	5.4
Bloomberg US Aggregate TR	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2
LM Capital	-1.0	9.0	9.0	-1.2	3.7	2.8	1.3	5.8	-1.8	5.4
Bloomberg US Aggregate TR	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2
eV US Core Fixed Inc Net Rank	32	27	50	93	59	61	9	42	52	60
NIS Dynamic Fixed Income	0.3									
Bloomberg US Aggregate TR	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2
Bloomberg US Universal TR	-1.1	7.6	9.3	-0.3	4.1	3.9	0.4	5.6	-1.3	5.5
eV US Core Plus Fixed Inc Net Rank	19									
Hedged Equity	17.7	4.6	16.3	-2.9	10.1	2.9	-4.4	4.9	17.4	9.3
HFRX Equity Hedge Index	12.1	4.6	10.7	-9.4	10.0	0.1	-2.3	1.4	11.1	4.8
InvMetrics Public DB Hedge Funds Net Rank	10	75	2	67	16	34	88	33	6	9
Parametric	17.7	4.6	16.3	-2.9	10.3					
HFRX Equity Hedge Index	12.1	4.6	10.7	-9.4	10.0	0.1	-2.3	1.4	11.1	4.8
S&P 500	28.7	18.4	31.5	-4.4	21.8	12.0	1.4	13.7	32.4	16.0
Cash	0.5	0.5	2.4	1.3	0.4	0.4	2.3	5.4	8.8	10.9





Statistics Summary							
5 Years Ending September 30, 2022							
	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error	
Total Fund	4.54%	10.26%	-0.61	1.07	0.34	1.52%	
Policy Benchmark	5.48%	9.49%		1.00	0.46	0.00%	
Domestic Equity	6.23%	20.17%	-0.57	1.06	0.26	4.19%	
Russell 3000	8.62%	18.62%		1.00	0.40	0.00%	
Northern Trust Wilshire 5000	8.52%	18.64%	-1.02	1.00	0.40	0.32%	
FT Wilshire 5000 Total Market	8.85%	18.60%		1.00	0.42	0.00%	
Great Lakes	4.11%	18.96%	-0.30	1.03	0.16	3.98%	
Russell 1000 Value	5.29%	18.09%		1.00	0.23	0.00%	
NTGI S&P 400	5.87%	21.36%	3.63	1.00	0.22	0.01%	
S&P 400 MidCap	5.82%	21.36%		1.00	0.22	0.00%	
Ariel	4.95%	24.21%	0.19	1.04	0.16	6.09%	
Russell 2500 Value	3.78%	22.58%		1.00	0.12	0.00%	
International Equity	-1.76%	17.59%	-0.21	1.02	-0.16	4.40%	
MSCI EAFE	-0.84%	16.65%		1.00	-0.11	0.00%	
NTGI ACWI ex US	-0.65%	16.37%	0.11	0.99	-0.11	1.48%	
MSCI ACWI ex USA	-0.81%	16.40%		1.00	-0.12	0.00%	
Ativo International Equity ex US							
MSCI EAFE	-0.84%	16.65%		1.00	-0.11	0.00%	

	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
William Blair	-2.65%	22.17%	-0.11	1.10	-0.17	7.66%
MSCI EAFE Small Cap	-1.79%	19.07%		1.00	-0.15	0.00%
Emerging Markets Equity	-2.06%	17.87%	-0.13	1.00	-0.18	1.92%
MSCI Emerging Markets	-1.81%	17.68%		1.00	-0.16	0.00%
Northern Trust Emerging Markets Index	-2.06%	17.87%	-0.13	1.00	-0.18	1.92%
MSCI Emerging Markets	-1.81%	17.68%		1.00	-0.16	0.00%
Private Equity	12.13%	12.76%	-1.22	0.98	0.87	5.01%
Prequin Real Time	18.25%	11.98%		1.00	1.43	0.00%
Core Plus	0.67%	5.59%	0.41	1.07	-0.07	2.28%
Bloomberg US Aggregate TR	-0.27%	4.77%		1.00	-0.28	0.00%
MacKay Shields	0.68%	5.59%	0.42	1.07	-0.07	2.28%
Bloomberg US Aggregate TR	-0.27%	4.77%		1.00	-0.28	0.00%
Private Debt						
Credit Suisse Leveraged Loans	3.00%	7.12%		1.00	0.27	0.00%
Real Estate	9.02%	5.29%	-0.22	0.68	1.50	3.78%
NCREIF ODCE Equal Weighted (Net)	9.87%	6.22%		1.00	1.41	0.00%
Trumbull Property Fund	6.00%	5.89%	-1.36	0.84	0.84	2.84%
NCREIF ODCE Equal Weighted (Net)	9.87%	6.22%		1.00	1.41	0.00%
Trumbull Income Fund	7.87%	4.38%	-0.88	0.68	1.55	2.27%
NCREIF ODCE Equal Weighted (Net)	9.87%	6.22%		1.00	1.41	0.00%

	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Principal Enhanced Property Fund	12.72%	6.53%	0.59	0.75	1.78	4.82%
NCREIF ODCE Equal Weighted (Net)	9.87%	6.22%		1.00	1.41	0.00%
Infrastructure	10.19%	5.30%	0.63	0.01	1.72	5.46%
CPI + 3%	6.76%	1.33%		1.00	4.27	0.00%
Ullico Infrastructure	8.41%	4.60%	0.34	0.02	1.59	4.78%
CPI + 3%	6.76%	1.33%		1.00	4.27	0.00%
IFM Global Infrastructure (U.S.)	12.17%	6.65%	0.80	0.00	1.67	6.79%
CPI + 3%	6.76%	1.33%		1.00	4.27	0.00%
Short-term TIPS						
Bloomberg US Treasury 1-5 Yr TR	0.35%	2.24%		1.00	-0.32	0.00%
Investment Grade Bonds	0.39%	4.56%	0.67	0.94	-0.15	1.00%
Bloomberg US Aggregate TR	-0.27%	4.77%		1.00	-0.28	0.00%
LM Capital	0.27%	4.62%	0.55	0.95	-0.17	0.99%
Bloomberg US Aggregate TR	-0.27%	4.77%		1.00	-0.28	0.00%
NIS Dynamic Fixed Income						
Bloomberg US Aggregate TR	-0.27%	4.77%		1.00	-0.28	0.00%
Short-term Investment Grade Bonds						
Bloomberg US TIPS 1-5 Yr TR	2.24%	3.01%		1.00	0.39	0.00%
Long-Term Government Bonds						
Bloomberg US Govt Long TR	-1.62%	12.85%		1.00	-0.21	0.00%

	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Hedged Equity	4.37%	10.62%	0.29	1.18	0.31	5.25%
HFRX Equity Hedge Index	2.84%	7.90%		1.00	0.22	0.00%
Parametric	4.41%	10.63%	0.30	1.18	0.31	5.26%
HFRX Equity Hedge Index	2.84%	7.90%		1.00	0.22	0.00%
RMS Hedge Funds						
CBOE Eurekahedge Long Volatility Index						



# **Portfolio Reviews**

### Domestic Equity | As of September 30, 2022

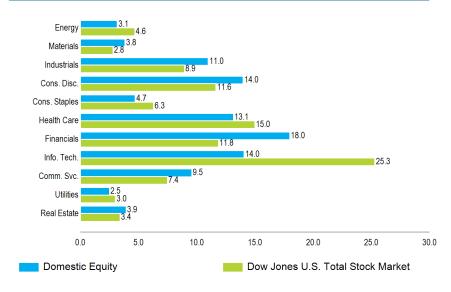
Asset Allocation on September 30, 2022						
	Actual	Actual				
Northern Trust Wilshire 5000	\$37,841,255	43.0%				
Great Lakes	\$17,115,148	19.4%				
NTGI S&P 400	\$9,633,407	10.9%				
Ariel	\$23,414,946	26.6%				
Total	\$88,004,756	100.0%				

#### U.S. Effective Style Map 3 Years 9 Months Ending September 30, 2022 Large Large Value Growth Northern Trust Wilshire 5000 Russell 3000 Great Lakes Domestic Equity NTGI S&P 400 Ariel Small Small Growth Value

## Domestic Equity | As of September 30, 2022

Total US Equity Characteristics					
	Portfolio	Index			
	Q3-22	Q3-22			
Market Value					
Market Value (\$M)	88.0				
Number Of Holdings	4038	4278			
Characteristics					
Weighted Avg. Market Cap. (\$B)	199.8	399.0			
Median Market Cap (\$B)	1.6	1.0			
P/E Ratio	13.7	17.3			
Yield	1.9	1.8			
EPS Growth - 5 Yrs.	15.2	17.5			
Price to Book	2.5	3.5			

### Sector Allocation (%) vs Dow Jones U.S. Total Stock Market



Top 10 Holdings	
APPLE INC	2.5%
MICROSOFT CORP	2.1%
BOYD GAMING CORP	1.3%
AFFILIATED MANAGERS GROUP INC.	1.2%
BERKSHIRE HATHAWAY INC	1.2%
LAZARD LTD	1.2%
AMAZON.COM INC	1.2%
MADISON SQUARE GARDEN ENTERTAINMENT CORP	1.2%
KKR & CO INC	1.2%
MERCK & CO INC	1.1%
Total	<b>14.2</b> %

## Northern Trust Wilshire 5000 | As of September 30, 2022

Accou	nt Information
Account Name	Northern Trust Wilshire 5000
Account Structure	Commingled Fund
Investment Style	Passive
Inception Date	6/30/07
Account Type	US Equity
Benchmark	FT Wilshire 5000 Total Market
Universe	eV US All Cap Core Equity Net

Portfolio Performance Summary								
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs 1 (%)	0 Yrs (%)	S.I. (%)	S.I. Date
Northern Trust Wilshire 5000	-4.6	-24.9	-18.0	7.5	8.5	11.3	7.9	Jun-07
FT Wilshire 5000 Total Market	-4.4	-24.4	-17.2	8.1	8.8	11.5	8.0	Jun-07
Dow Jones U.S. Total Stock Market	-4.6	-24.9	-18.1	7.5	8.5	11.3	7.9	Jun-07
eV US All Cap Core Equity Net Rank	48	50	47	38	40	25	26	Jun-07

Top 10 Holdings	
APPLE INC	5.7%
MICROSOFT CORP	4.7%
AMAZON.COM INC	2.7%
TESLA INC	1.9%
NT COLLECTIVE SHORT TERM INVT FD	1.8%
ALPHABET INC	1.6%
ALPHABET INC	1.4%
BERKSHIRE HATHAWAY INC	1.3%
UNITEDHEALTH GROUP INC	1.3%
JOHNSON & JOHNSON	1.2%
Total	23.7%

NTGI Wilshire	5000 Characteristics	
	Portfolio	Index
	Q3-22	Q3-22
Market Value		
Market Value (\$M)	37.8	
Number Of Holdings	4034	4278
Characteristics		
Weighted Avg. Market Cap. (\$B)	398.7	399.0
Median Market Cap (\$B)	1.1	1.0
P/E Ratio	17.3	17.3
Yield	1.8	1.8
EPS Growth - 5 Yrs.	17.5	17.5
Price to Book	3.5	3.5
Sector Distribution		
Energy	4.5	4.6
Materials	2.7	2.8
Industrials	8.7	8.9
Consumer Discretionary	11.3	11.6
Consumer Staples	6.1	6.3
Health Care	14.5	15.0
Financials	11.5	11.8
Information Technology	24.5	25.3
Communication Services	7.2	7.4
Utilities	2.8	3.0
Real Estate	3.3	3.4

# Park Employees' Annuity & Benefit Fund of Chicago Pension Plan

### Great Lakes | As of September 30, 2022

Account Information				
Account Name	Great Lakes			
Account Structure	Separate Account			
Investment Style	Active			
Inception Date	6/30/07			
Account Type	US Equity			
Benchmark	Russell 1000 Value			
Universe	eV US Large Cap Value Equity Net			

Portfolio Performance Summary								
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs 1 (%)	0 Yrs (%)	S.I. (%)	S.I. Date
Great Lakes	-7.0	-16.3	-11.2	4.1	3.8	9.0	5.7	Jun-07
Russell 1000 Value	-5.6	-17.8	-11.4	4.4	5.3	9.2	5.6	Jun-07
eV US Large Cap Value Equity Net Rank	80	45	62	79	90	67	73	Jun-07

Top 10 Holdings				
MERCK & CO INC	4.2%			
RENAISSANCERE HOLDINGS LTD	3.9%			
CITIGROUP INC	3.5%			
ROYAL DUTCH SHELL PLC ADR	3.4%			
BERKSHIRE HATHAWAY INC	3.4%			
BORGWARNER INC	3.4%			
COMCAST CORP	3.3%			
CVS HEALTH CORP	3.2%			
CUMMINS INC.	3.2%			
MCKESSON CORP	3.2%			
Total	34.7%			

Great Lake	es Characteristics	
	Portfolio	Index
	Q3-22	Q3-22
Market Value		
Market Value (\$M)	17.1	
Number Of Holdings	46	855
Characteristics		
Weighted Avg. Market Cap. (\$B)	138.7	135.4
Median Market Cap (\$B)	66.6	11.5
P/E Ratio	14.7	14.1
Yield	2.3	2.5
EPS Growth - 5 Yrs.	8.6	12.5
Price to Book	2.0	2.3
Sector Distribution		
Energy	3.6	6.9
Materials	4.8	4.2
Industrials	9.0	10.2
Consumer Discretionary	9.2	5.8
Consumer Staples	4.3	7.3
Health Care	19.2	17.5
Financials	24.1	20.2
Information Technology	6.7	8.9
Communication Services	10.0	8.1
Utilities	4.2	6.1
Real Estate	0.0	4.9

# Park Employees' Annuity & Benefit Fund of Chicago Pension Plan

### NTGI S&P 400 | As of September 30, 2022

Account Information				
Account Name	NTGI S&P 400			
Account Structure	Commingled Fund			
Investment Style	Passive			
Inception Date	5/31/17			
Account Type	US Equity			
Benchmark	S&P 400 MidCap			
Universe	eV US Mid Cap Core Equity Net			

Portfolio Performance Summary								
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs 1 (%)	0 Yrs (%)	S.I. (%)	S.I. Date
NTGI S&P 400	-2.5	-21.5	-15.2	6.0	5.9		6.4	May-17
S&P 400 MidCap	-2.5	-21.5	-15.2	6.0	5.8	10.0	6.4	May-17
eV US Mid Cap Core Equity Net Rank	23	40	45	44	63		67	May-17

Top 10 Holdings	
EQT CORP	0.8%
CARLISLE COS INC	0.8%
TARGA RESOURCES CORP	0.7%
FIRST SOLAR INC	0.7%
WOLFSPEED INC	0.7%
FIRST HORIZON CORP	0.6%
STEEL DYNAMICS INC	0.6%
HUBBELL INC	0.6%
ALLEGHANY CORP	0.6%
RPM INTERNATIONAL INC	0.6%
Total	6.7%

NTGI S&P 4	NTGI S&P 400 Characteristics					
	Portfolio	Index				
	Q3-22	Q3-22				
Market Value						
Market Value (\$M)	9.6					
Number Of Holdings	404	401				
Characteristics						
Weighted Avg. Market Cap. (\$B)	6.3	6.3				
Median Market Cap (\$B)	4.6	4.6				
P/E Ratio	12.6	12.7				
Yield	1.9	1.8				
EPS Growth - 5 Yrs.	18.5	18.4				
Price to Book	2.4	2.4				
Sector Distribution						
Energy	4.5	4.0				
Materials	6.4	6.5				
Industrials	18.5	18.4				
Consumer Discretionary	13.4	13.7				
Consumer Staples	4.1	4.5				
Health Care	10.3	10.5				
Financials	15.6	15.4				
Information Technology	12.0	13.5				
Communication Services	1.5	1.8				
Utilities	4.0	3.9				
Real Estate	8.1	7.7				

# Park Employees' Annuity & Benefit Fund of Chicago Pension Plan

## Ariel | As of September 30, 2022

Account Information				
Account Name	Ariel			
Account Structure	Separate Account			
Investment Style	Active			
Inception Date	6/30/07			
Account Type	US Equity			
Benchmark	Russell 2500 Value			
Universe	eV US Small-Mid Cap Value Equity Net			

Portfolio Performance Summary								
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs 1 (%)	0 Yrs (%)	S.I. (%)	S.I. Date
Ariel Russell 2500 Value eV US Small-Mid Cap Value Equity Net Rank	-7.5 -4.5 90	-29.1 -20.4 98	-25.8 -15.4 99	5.0 <i>4.5</i> 56	4.4 3.8 48	9.3 <i>8.4</i> <i>32</i>	5.9 5.8 60	Jun-07 <i>Jun-07</i> Jun-07

Top 10 Holdings	
BOYD GAMING CORP	4.7%
LAZARD LTD	4.6%
AFFILIATED MANAGERS GROUP INC.	4.5%
MADISON SQUARE GARDEN ENTERTAINMENT CORP	4.4%
KKR & CO INC	4.2%
PARAMOUNT GLOBAL	4.0%
MATTEL INC.	3.8%
AXALTA COATING SYSTEMS LTD	3.8%
BOK FINANCIAL CORP	3.7%
JONES LANG LASALLE INC	3.7%
Total	41.3%

Arie	el Characteristics	
	Portfolio	Index
	Q3-22	Q3-22
Market Value		
Market Value (\$M)	23.4	
Number Of Holdings	37	1830
Characteristics		
Weighted Avg. Market Cap. (\$B)	8.7	5.7
Median Market Cap (\$B)	6.0	1.4
P/E Ratio	10.4	10.6
Yield	1.6	2.3
EPS Growth - 5 Yrs.	15.2	14.5
Price to Book	2.1	1.8
Sector Distribution		
Energy	0.0	4.7
Materials	3.8	5.6
Industrials	13.0	17.1
Consumer Discretionary	22.0	10.1
Consumer Staples	2.8	3.0
Health Care	7.5	9.3
Financials	24.9	22.4
Information Technology	3.3	8.8
Communication Services	16.2	3.1
Utilities	0.0	4.2
Real Estate	6.0	11.6



### International Equity | As of September 30, 2022

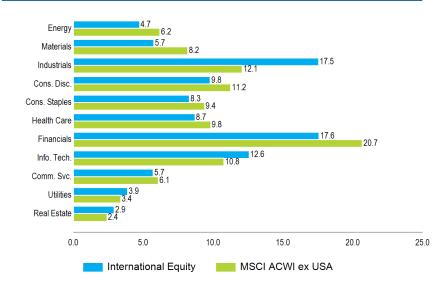
Asset Allocation on September 30, 2022					
	Actual	Actual			
NTGI ACWI ex US	\$21,154,093	45.9%			
Ativo International Equity ex US	\$13,280,604	28.8%			
William Blair	\$11,630,980	25.2%			
Total	\$46,065,676	100.0%			



### International Equity | As of September 30, 2022

Total International Equity Characteristics						
	Portfolio	Index	Portfolio			
	Q3-22	Q3-22	Q2-22			
Market Value						
Market Value (\$M)	46.1		51.0			
Number Of Holdings	2445	2270	2447			
Characteristics						
Weighted Avg. Market Cap. (\$B)	52.5	71.1	59.8			
Median Market Cap (\$B)	7.3	7.8	7.8			
P/E Ratio	11.7	11.4	12.1			
Yield	3.8	3.7	3.7			
EPS Growth - 5 Yrs.	14.0	12.5	14.8			
Price to Book	2.5	2.4	2.6			

### Sector Allocation (%) vs MSCI ACWI ex USA



Top 10 Holdings		
NESTLE SA, CHAM UND VEVEY	1.3%	
ROCHE HOLDING AG	1.0%	
TENCENT HOLDINGS LTD	0.8%	
LVMH MOET HENNESSY LOUIS VUITTON SE	0.8%	
TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	0.8%	
NOVARTIS AG	0.8%	
NOVO NORDISK 'B'	0.8%	
SAMSUNG ELECTRONICS CO LTD	0.7%	
ROYAL BANK OF CANADA	0.7%	
ASML HOLDING NV	0.7%	
Total	8.2%	



### International Equity | As of September 30, 2022

Total International Equity Region Allocation							
	vs MSCI ACWI ex USA						
Region	% of Total	% of Bench	% Diff				
North America ex U.S.	8.9%	8.3%	0.6%				
United States	1.8%	0.0%	1.8%				
Europe Ex U.K.	33.3%	30.2%	3.1%				
United Kingdom	7.4%	9.7%	-2.3%				
Pacific Basin Ex Japan	7.4%	8.0%	-0.5%				
Japan	13.5%	14.1%	-0.6%				
Emerging Markets	26.1%	29.0%	-2.9%				
Other	1.6%	0.8%	0.9%				
Total	100.0%	100.0%	0.0%				

# Park Employees' Annuity & Benefit Fund of Chicago Pension Plan

## NTGI ACWI ex US | As of September 30, 2022

Account Information				
Account Name	NTGI ACWI ex US			
Account Structure	Commingled Fund			
Investment Style	Passive			
Inception Date	3/01/08			
Account Type	Equity			
Benchmark	MSCI ACWI ex USA			
Universe	eV ACWI ex-US Core Equity Net			

Portfolio Performance Summary								
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs 10 (%)	0 Yrs (%)	S.I. (%)	S.I. Date
NTGI ACWI ex US MSCI ACWI ex USA	-10.6 -9.9	-26.7 -26.5		-1.5 <i>-1.5</i>	-0.7 -0.8	3.2 <i>3.0</i>	1.4 1.1	Mar-08 <i>Mar-08</i>
eV ACWI ex-US Core Equity Net Rank	9.9 79	31	34	70	65	78	79	Mar-08

Top 10 Holdings	
TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	1.6%
NESTLE SA, CHAM UND VEVEY	1.6%
ROCHE HOLDING AG	1.2%
TENCENT HOLDINGS LTD	1.1%
SHELL PLC	0.9%
SAMSUNG ELECTRONICS CO LTD	0.9%
NOVARTIS AG	0.9%
ASTRAZENECA PLC	0.8%
ASML HOLDING NV	0.8%
NOVO NORDISK 'B'	0.8%
Total	10.6%

	Portfolio	Index
	Q3-22	Q3-22
Market Value		
Market Value (\$M)	21.2	
Number Of Holdings	2354	2270
Characteristics		
Weighted Avg. Market Cap. (\$B)	71.9	71.1
Median Market Cap (\$B)	7.5	7.8
P/E Ratio	11.4	11.4
Yield	3.7	3.7
EPS Growth - 5 Yrs.	12.6	12.5
Price to Book	2.4	2.4
Sector Distribution		
Energy	6.1	6.2
Materials	8.0	8.2
Industrials	11.7	12.1
Consumer Discretionary	11.0	11.2
Consumer Staples	9.1	9.4
Health Care	9.7	9.8
Financials	20.4	20.7
Information Technology	10.5	10.8
Communication Services	5.9	6.1
Utilities	3.3	3.4
Real Estate	2.3	2.4

### Ativo International Equity ex US | As of September 30, 2022

Account Information				
Account Name	Ativo International Equity ex US			
Account Structure	Commingled Fund			
Investment Style	Active			
Inception Date	9/01/18			
Account Type	Equity			
Benchmark	MSCI EAFE			
Universe	eV EAFE Large Cap Core Net			

Portfolio Performance Summary								
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs 1 (%)	IO Yrs (%)	S.I. (%)	S.I. Date
Ativo International Equity ex US	-10.4	-28.7	-24.9	-3.9			-2.6	Sep-18
MSCI EAFE	-9.4	-27.1	-25.1	-1.8	-0.8	3.7	-1.5	Sep-18
eV EAFE Large Cap Core Net Rank	76	70	44	96			79	Sep-18

Top 10 Holdings		
CASH - USD	2.4%	
NESTLE SA, CHAM UND VEVEY	1.9%	
ROCHE HOLDING AG	1.6%	
LVMH MOET HENNESSY LOUIS VUITTON SE	1.4%	
WOLTERS KLUWER NV	1.4%	
UBS GROUP AG	1.3%	
TELUS CORP	1.3%	
TOTALENERGIES SE	1.3%	
NOVARTIS AG	1.3%	
PICC PROPERTY AND CASUALTY COMPANY LIMITED	1.3%	
Total	15.0%	

Ativo International Equity ex US Characteristics				
	Portfolio	Index		
	Q3-22	Q3-22		
Market Value				
Market Value (\$M)	13.3			
Number Of Holdings	116	798		
Characteristics				
Weighted Avg. Market Cap. (\$B)	62.1	67.3		
Median Market Cap (\$B)	20.4	10.4		
P/E Ratio	8.9	12.2		
Yield	5.1	3.7		
EPS Growth - 5 Yrs.	16.1	11.1		
Price to Book	2.3	2.4		
Sector Distribution				
Energy	5.3	4.9		
Materials	6.7	7.5		
Industrials	14.1	15.0		
Consumer Discretionary	6.7	11.0		
Consumer Staples	9.0	11.3		
Health Care	7.0	13.9		
Financials	17.3	17.6		
Information Technology	11.2	7.9		
Communication Services	7.6	4.8		
Utilities	6.9	3.4		
Real Estate	5.7	2.8		

# Park Employees' Annuity & Benefit Fund of Chicago Pension Plan

### William Blair | As of September 30, 2022

Account Information				
Account Name	William Blair			
Account Structure	Mutual Fund			
Investment Style	Active			
Inception Date	12/31/11			
Account Type	Equity			
Benchmark	MSCI EAFE Small Cap			
Universe	Foreign Small/Mid Growth MStar MF			

Portfolio Performance Summary									
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date	
William Blair	-7.0	-43.1	-43.1	-2.1	-2.6	3.7	4.8	Dec-11	
MSCI EAFE Small Cap	-9.8	-32.1	-32.1	-2.2	-1.8	5.3	6.1	Dec-11	
MSCI ACWI ex US Small Cap	-8.4	-29.4	-28.9	0.4	-0.6	4.4	5.3	Dec-11	
Foreign Small/Mid Growth MStar MF Rank	9	77	86	47	72	83	86	Dec-11	

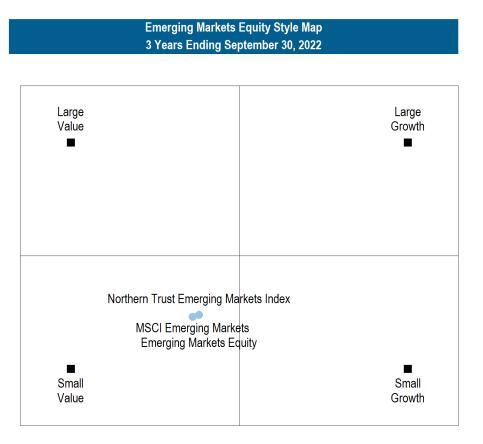
Top 10 Holdings	
CASH - USD	3.0%
AU SMALL FINANCE BANK LIMITED	2.5%
GRUPO AEROPORTUARIO DEL CENTRO NORTE 'B'	2.4%
BEAZLEY PLC	2.3%
TECHNOPRO HOLDINGS INC	2.2%
BAYCURRENT CONSULTING INC	2.0%
PROYA COSMETICS CO LTD	1.8%
SMS	1.8%
ARISTON HOLDING NV COMMON STOCK EUR.01	1.7%
PARKLAND CORP	1.6%
Total	21.2%

Portfolio	Index
~~~~	
Q3-22	Q3-22
11.6	
111	2327
3.4	2.3
2.5	1.0
19.9	10.7
2.4	3.6
14.5	9.5
3.5	2.1
1.6	3.0
0.5	9.8
31.9	22.3
10.9	12.0
6.0	6.5
8.8	6.9
12.7	11.5
17.8	9.2
3.2	4.0
1.5	3.2
0.8	11.6
	111   3.4   2.5   19.9   2.4   14.5   3.5   14.5   3.5   10.9   6.0   8.8   12.7   17.8   3.2   1.5



#### Emerging Markets Equity | As of September 30, 2022

Asset Allocation on September 30, 2022				
	Actual	Actual		
Northern Trust Emerging Markets Index	\$6,097,684	100.0%		
Total	\$6,097,684	100.0%		



## Park Employees' Annuity & Benefit Fund of Chicago Pension Plan

#### Northern Trust Emerging Markets Index | As of September 30, 2022

Account Information		
Account Name	Northern Trust Emerging Markets Index	
Account Structure	Commingled Fund	
Investment Style	Passive	
Inception Date	5/01/15	
Account Type	Equity	
Benchmark	MSCI Emerging Markets	
Universe	eV Emg Mkts Equity Net	

Portfolio Performance Summary								
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Northern Trust Emerging Markets Index	-12.2	-27.5	-28.2	-2.5	-2.1		-0.2	May-15
MSCI Emerging Markets	-11.6	-27.2	-28.1	-2.1	-1.8	1.0	0.0	May-15
eV Emg Mkts Equity Net Rank	82	53	53	67	61		76	May-15

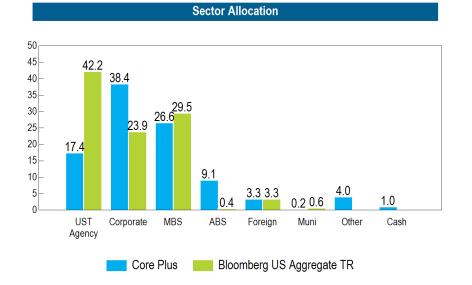
Top 10 Holdings	
TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	5.6%
TENCENT HOLDINGS LTD	3.6%
SAMSUNG ELECTRONICS CO LTD	3.0%
ALIBABA GROUP HOLDING LTD	2.6%
MEITUAN DIANPING USD0.00001 A B CLASS ISIN KYG596691041	1.6%
RELIANCE INDUSTRIES LTD	1.5%
INFOSYS LTD	1.0%
CHINA CONSTRUCTION BANK CORP	1.0%
JD.COM INC	0.9%
ICICI BANK	0.9%
Total	21.9%

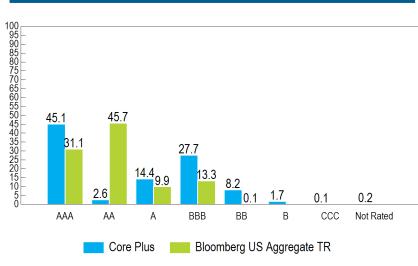
NTGI Emerging Markets Characteristics		
	Portfolio	Index
	Q3-22	Q3-22
Market Value		
Market Value (\$M)	6.1	
Number Of Holdings	1374	1384
Characteristics		
Weighted Avg. Market Cap. (\$B)	86.9	86.9
Median Market Cap (\$B)	5.6	5.5
P/E Ratio	10.0	10.1
Yield	3.8	3.8
EPS Growth - 5 Yrs.	14.7	14.3
Price to Book	2.5	2.5
Sector Distribution		
Energy	5.2	5.3
Materials	8.6	8.7
Industrials	5.6	5.8
Consumer Discretionary	13.6	14.0
Consumer Staples	6.5	6.6
Health Care	3.8	3.9
Financials	22.2	22.6
Information Technology	17.9	18.3
Communication Services	9.6	9.7
Utilities	3.1	3.2
Real Estate	2.0	2.0

#### Core Plus | As of September 30, 2022

Core Plus Characteristics				
vs. Bloomberg US Aggregate TR				
Portfolio				
	Q3-22	Q3-22		
Fixed Income Characteristics				
Yield to Maturity	6.5	4.7		
Average Duration	6.7	6.4		
Average Quality	AA	AA		
Weighted Average Maturity	7.8	13.1		

Asset Allocation on September 30, 2022		
	Actual	Actual
MacKay Shields	\$21,953,132	100.0%
Total	\$21,953,132	100.0%





### Credit Quality Allocation

MEKETA INVESTMENT GROUP

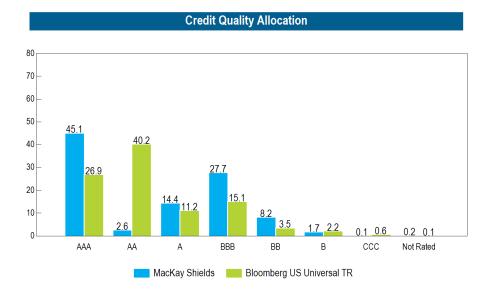
## Park Employees' Annuity & Benefit Fund of Chicago Pension Plan

#### MacKay Shields | As of September 30, 2022

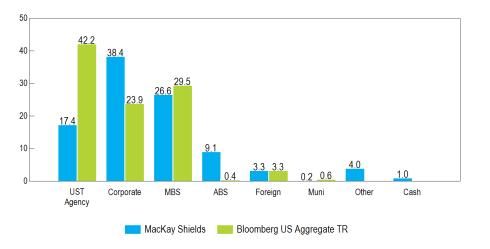
	Account Information
Account Name	MacKay Shields
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	8/31/01
Account Type	US Fixed Income
Benchmark	Bloomberg US Aggregate TR
Universe	eV US Core Fixed Inc Net

Portfolio	Perform	nance	Sum	mary			
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
MacKay Shields	-5.1	-16.5	-2.1	0.4	1.4	4.2	Aug-01
Bloomberg US Aggregate TR	-4.8	-14.6	-3.3	-0.3	0.9	3.4	Aug-01
eV US Core Fixed Inc Net Rank	93	96	10	15	20	б	Aug-01

MacKay Shields Characteristics				
vs. Bloomberg US Aggregate TR				
Portfolio Ir				
	Q3-22	Q3-22		
Fixed Income Characteristics				
Yield to Maturity	6.5	4.7		
Average Duration	6.7	6.4		
Average Quality	AA	AA		
Weighted Average Maturity	7.8	13.1		



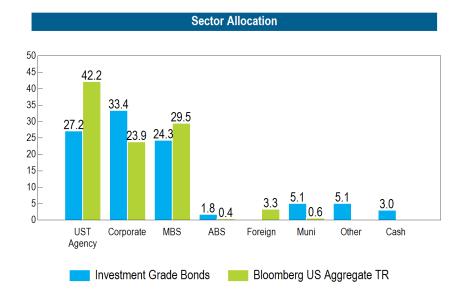
Sector Allocation

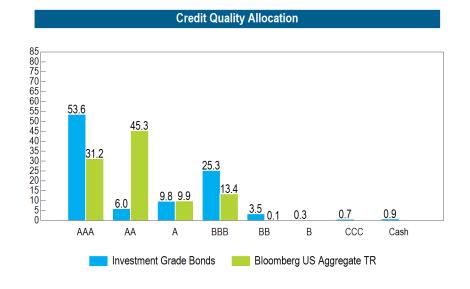


#### Investment Grade Bonds | As of September 30, 2022

Asset Allocation on September 30, 2022				
	Actual	Actual		
LM Capital	\$22,850,517	77.6%		
NIS Dynamic Fixed Income	\$6,582,445	22.4%		
Total	\$29,432,962	100.0%		

Investment Grade Bonds Characteristics				
vs. Bloomberg	US Aggregate 1	ſR		
	Portfolio	Index	Portfolio	
	Q3-22	Q3-22	Q2-22	
Fixed Income Characteristics				
Yield to Maturity	5.2	4.7	4.2	
Average Duration	5.4	6.4	5.7	
Average Quality	AA	AA	AA	
Weighted Average Maturity	7.5	13.1	7.7	





#### MEKETA INVESTMENT GROUP

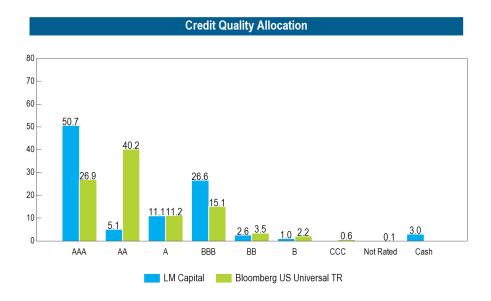
## Park Employees' Annuity & Benefit Fund of Chicago Pension Plan

#### LM Capital | As of September 30, 2022

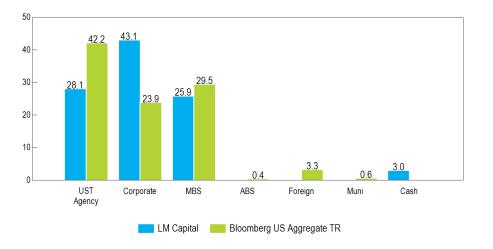
Account Information							
Account Name	LM Capital						
Account Structure	Separate Account						
Investment Style	Active						
Inception Date	9/30/09						
Account Type	US Fixed Income Core						
Benchmark	Bloomberg US Aggregate TR						
Universe	eV US Core Fixed Inc Net						

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs 1 (%)	0 Yrs (%)	S.I. (%)	S.I. Date
LM Capital	-4.4	-13.4	-2.2	0.2	1.3	2.4	Sep-09
Bloomberg US Aggregate TR	-4.8	-14.6	-3.3	-0.3	0.9	2.1	Sep-09
eV US Core Fixed Inc Net Rank	32	15	14	27	30	50	Sep-09

LM Capital Characteristics							
vs. Bloomberg US Aggregate TR							
	Portfolio	Index					
	Q3-22	Q3-22					
Fixed Income Characteristics							
Yield to Maturity	5.1	4.7					
Average Duration	5.4	6.4					
Average Quality	AA	AA					
Weighted Average Maturity	7.5	13.1					



Sector Allocation



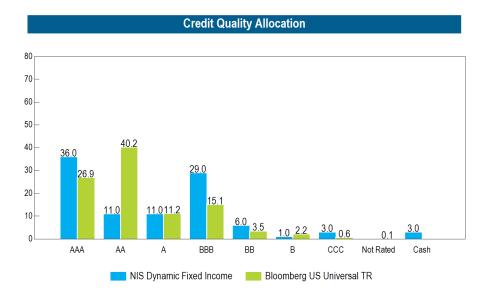
## Park Employees' Annuity & Benefit Fund of Chicago Pension Plan

#### NIS Dynamic Fixed Income | As of September 30, 2022

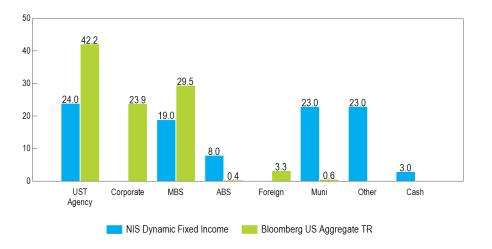
Account Information						
Account Name	NIS Dynamic Fixed Income					
Account Structure	Commingled Fund					
Investment Style	Active					
Inception Date	12/31/20					
Account Type	US Fixed Income					
Benchmark	Bloomberg US Aggregate TR					
Universe	eV US Core Plus Fixed Inc Net					

Portfolio Performance Summary							
	QTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	S.I.	S.I.
	(%)	(%)	(%)	(%)	(%)	(%)	Date
NIS Dynamic Fixed Income	-3.7	-13.6				-7.8	Dec-20
Bloomberg US Aggregate TR	-4.8	-14.6	-3.3	-0.3	0.9	-9.4	Dec-20
Bloomberg US Universal TR	-4.5	-14.9	-3.1	-0.2	1.2	-9.4	Dec-20
eV US Core Plus Fixed Inc Net Rank	15	14				14	Dec-20

NIS Dynamic Fixed Income Characteristics							
vs. Bloomberg US Aggregate TR							
	Portfolio	Index					
	Q3-22	Q3-22					
Fixed Income Characteristics							
Yield to Maturity	5.4	4.7					
Average Duration	5.3	6.4					
Average Quality	А	AA					
Weighted Average Maturity	7.6	13.1					

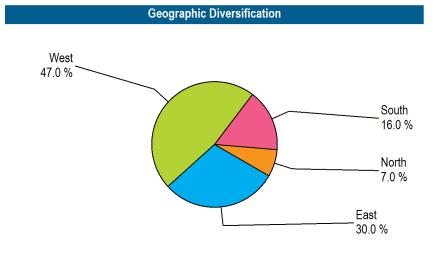


Sector Allocation



#### Park Employees' Annuity & Benefit Fund of Chicago Pension Plan

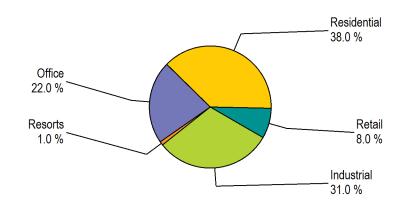
#### As of September 30, 2022



Account InformationAccount NameTrumbull Property FundAccount StructureCommingled FundInvestment StyleActiveInception Date6/30/07Account TypeReal EstateBenchmarkNCREIF ODCE Equal Weighted (Net)Universe

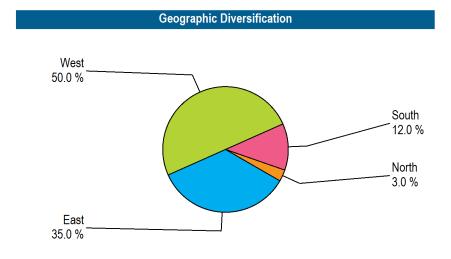
Portfolio Performance Summary								
	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Trumbull Property Fund	-0.2	10.9	16.3	6.7	5.1	6.7	4.5	Jun-07
NCREIF ODCE Equal Weighted (Net)	0.8	13.3	21.7	12.1	9.9	10.3	6.0	Jun-07

Property Type Allocation



#### Park Employees' Annuity & Benefit Fund of Chicago Pension Plan

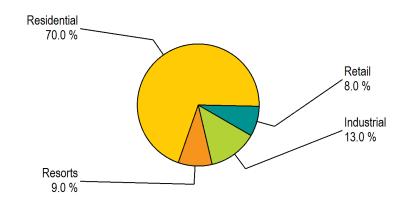
#### As of September 30, 2022



Account InformationAccount NameTrumbull Income FundAccount StructureCommingled FundInvestment StyleActiveInception Date6/30/07Account TypeReal EstateBenchmarkNCREIF ODCE Equal Weighted (Net)Universe

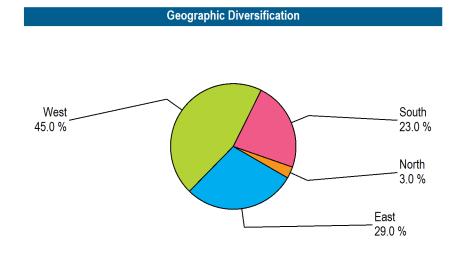
Portfolio Performance Summary								
	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Trumbull Income Fund	0.3	6.7	12.2	7.4	6.9	7.7	6.2	Jun-07
NCREIF ODCE Equal Weighted (Net)	0.8	13.3	21.7	12.1	9.9	10.3	6.0	Jun-07

Property Type Allocation



#### Park Employees' Annuity & Benefit Fund of Chicago Pension Plan

#### As of September 30, 2022

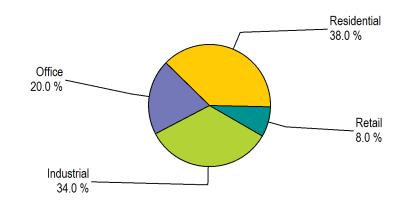


Account NamePrincipal Enhanced Property FundAccount StructureCommingled FundInvestment StyleActiveInception Date6/30/08Account TypeReal EstateBenchmarkNCREIF ODCE Equal Weighted (Net)

**Account Information** 

**Portfolio Performance Summary** Fiscal QTD 1 Yr 3 Yrs 5 Yrs 10 Yrs S.I. S.I YTD (%) (%) (%) (%) (%) (%) Date Principal Enhanced Property Fund 14.2 13.3 1.4 13.9 26.6 11.7 6.3 Jun-08 NCREIF ODCE Equal Weighted (Net) 0.8 13.3 21.7 12.1 9.9 10.3 5.9 Jun-08

Property Type Allocation



Universe



## **Investment Expense Analysis**



#### Fee Summary | As of September 30, 2022

Annual Investment Expense Analysis As Of September 30, 2022							
Name	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee	Median Expense Ratio		
Growth Assets		\$162,448,755					
Domestic Equity		\$88,004,756					
Northern Trust Wilshire 5000	0.02% of Assets	\$37,841,255	\$7,568	0.02%	0.75%		
Great Lakes	0.25% of Assets	\$17,115,148	\$42,788	0.25%	0.75%		
NTGI S&P 400	0.02% of Assets	\$9,633,407	\$1,445	0.02%	0.75%		
Ariel	0.60% of Assets	\$23,414,946	\$140,490	0.60%	0.75%		
International Equity		\$46,065,676					
NTGI ACWI ex US	0.04% of Assets	\$21,154,093	\$7,404	0.04%	0.88%		
Ativo International Equity ex US	0.60% of Assets	\$13,280,604	\$79,684	0.60%	0.88%		
William Blair	1.14% of Assets	\$11,630,980	\$132,593	1.14%	0.88%		
Emerging Markets Equity		\$6,097,684					
Northern Trust Emerging Markets Index	0.08% of Assets	\$6,097,684	\$4,878	0.08%	0.88%		

Meketa has since negotiated the fee for Great Lakes to 0.25%, subsequent to the date of this report.

#### Fee Summary | As of September 30, 2022

Name	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee	Median Expense Ratio
Private Equity		\$22,280,638			
HarbourVest 2017 Global Fund, L.P.	1.00% of Committed Capital	\$6,643,108	\$75,000	0.85%	
HarbourVest Partners VII-Buyout Partnership Fund, L.P.	0.00% of Assets	\$62,401	\$0	0.00%	
HarbourVest Partners VII-Mezzanine and Distressed Debt Fund, L.P.	0.00% of Assets	\$25,619	\$0	0.00%	
HarbourVest Partners VII-Venture Partnership Fund, L.P.	0.00% of Assets	\$167,958	\$0	0.00%	
Mesirow Financial Private Equity Partnership Fund III, L.P.	0.34% of Assets	\$492,828	\$23,702	4.08%	
Mesirow Financial Private Equity Partnership Fund IV, L.P.	0.39% of Assets	\$1,863,131	\$38,730	0.39%	
Mesirow Financial Capital Partners IX, L.P.	0.00% of Assets	\$58,540	\$0	0.00%	
Mesirow Financial Private Equity Fund VII-A, L.p.	1.00% of Commited Capital	\$8,992,211	\$75,000	1.00%	
NYLCAP Select Manager Fund, L.P.	0.00% of Assets	\$110,560	\$0	0.00%	
PineBridge PEP V Europe, L.P.	0.85% of Assets	\$842,098	\$7,158	0.85%	
Entrust Global Recovery Fund, L.P.	Performance-based 1.00 and 15.00	\$3,022,184	\$30,222	1.00%	0.44%

#### Fee Summary | As of September 30, 2022

Name	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee	Median Expense Ratio
Total Credit		\$21,953,132			
Core Plus		\$21,953,132			
MacKay Shields	0.30% of Assets	\$21,953,132	\$65,859	0.30%	0.44%
Total Inflation Hedges		\$79,609,891			
Real Estate		\$31,080,256			
Trumbull Property Fund	0.96% of First 10.0 Mil, 0.83% of Next 15.0 Mil, 0.81% of Next 25.0 Mil, 0.79% of Next 50.0 Mil, 0.67% of Next 150.0 Mil, 0.60% of Next 150.0 Mil, 0.56% of Next 200.0 Mil, 0.52% Thereafter	\$11,117,637	\$104,721	0.94%	0.86%
Trumbull Income Fund	0.97% of First 10.0 Mil, 0.85% of Next 15.0 Mil, 0.82% of Next 75.0 Mil, 0.79% of Next 150.0 Mil, 0.76% of Next 150.0 Mil, 0.72% of Next 200.0 Mil, 0.68% Thereafter	\$603,228	\$5,851	0.97%	0.86%
Principal Enhanced Property Fund	1.50% of First 1.0 Mil, 1.40% of Next 4.0 Mil, 1.30% of Next 5.0 Mil, 1.10% Thereafter	\$19,359,391	\$238,953	1.23%	0.86%

#### Fee Summary | As of September 30, 2022

Name	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee	Median Expense Ratio
Infrastructure		\$48,529,635			
Ullico Infrastructure	1.60% of First 75.0 Mil, 1.25% of Next 250.0 Mil, 1.00% Thereafter	\$29,328,453	\$469,255	1.60%	
IFM Global Infrastructure (U.S.)	Performance-based 0.77 and 10.00	\$19,201,182	\$147,849	0.77%	
Total Risk Mitigating Strategies		\$56,130,954			
Investment Grade Bonds		\$29,432,962			
LM Capital	0.15% of First 100.0 Mil, 0.10% Thereafter	\$22,850,517	\$34,276	0.15%	0.44%
NIS Dynamic Fixed Income	0.55% of Assets	\$6,582,445	\$36,203	0.55%	0.44%
Hedged Equity		\$25,160,325			
Parametric	0.33% of Assets	\$25,160,325	\$81,802	0.33%	1.53%
Cash		\$1,537,668			
Total		\$320,142,732	\$1,851,431	0.57%	



#### Fund Summary | As of September 30, 2022

Benchmark History As of September 30, 2022											
6/1/2022	Present	24% Russell 3000 / 18% MSCI EAFE / 6% MSCI Emerging Markets / 7% Prequin Real Time / 5% Credit Suisse Leveraged Loans / 10% NCREIF ODCE Equal Weighted (Net) / 8% CPI + 3% / 4% Bloomberg US TIPS 1-5 Yr TR / 7% Bloomberg US Aggregate TR / 5% Bloomberg US Aggregate 1-3 Yr TR / 3% Bloomberg US Govt Long TR / 3% CBOE BXM									
2/1/2019	5/31/2022	17.5% Bloomberg US Aggregate TR / 28.5% Dow Jones U.S. Total Stock Market / 20% MSCI ACWI ex USA / 10% NCREIF ODCE (net) / 7% Prequin Real Time / 7% HFRX Equity Hedge Index / 10% CPI + 4%									
12/1/2013	1/31/2019	25.5% Bloomberg US Aggregate TR / 32.5% FT Wilshire 5000 Total Market / 16% MSCI ACWI ex USA / 9% NCREIF-ODCE / 7% CPI + 4% / 10% HFRX Equity Hedge Index									
4/1/2011	11/30/2013	27% Bloomberg US Aggregate TR / 27% FT Wilshire 5000 Total Market / 17% MSCI ACWI ex USA / 12% NCREIF-ODCE / 7% CPI + 4% / 10% HFRX Equity Hedge Index									
3/1/2008	3/31/2011	35% Bloomberg US Aggregate TR / 38% FT Wilshire 5000 Total Market / 12% MSCI ACWI ex USA / 10% NCREIF-ODCE / 5% CPI + 4%									
11/30/2003	2/29/2008	35% Bloomberg US Aggregate TR / 38% FT Wilshire 5000 Total Market / 12% MSCI EAFE / 10% NCREIF-ODCE / 5% CPI + 4%									



## **Private Markets Managers**



#### Private Markets Managers

## Private Markets Managers' Performance Overview

Managers	Strategy	Vintage Year	Commitment (\$mm)	Unfunded	Net IRR <sup>,</sup>	Net Multiple	Median Peer IRR²	Quartile Rank
Private Equity Managers								
HarbourVest Partners VII-Buyout Partnership Fund, L.P.	Buyout - Fund of Funds	2003	\$24.5	\$1.3	8.8%	1.7x	12.8%	2
HarbourVest Partners VII-Mezzanine and Distressed Debt Fund, L.P.	Mezz/Special Situations - Fund of Funds	2003	\$3.5	\$0.2	6.4%	1.5x	12.8%	2
HarbourVest Partners VII-Venture Partnership Fund, L.P.	Venture - Fund of Funds	2003	\$7.0	\$0.1	6.7%	1.6x	12.8%	2
HarbourVest 2017 Global Fund, L.P.	Fund of Funds	2017	\$7.5	\$2.1	28.4%	1.9x	28.2%	2
Mesirow Financial Private Equity Partnership Fund III, L.P.	Fund of Funds	2005	\$7.0	\$0.1	8.4%	1.8x	8.0%	2
Mesirow Financial Private Equity Partnership Fund IV, L.P.	Fund of Funds	2008	\$10.0	\$0.3	11.4%	2.1x	12.9%	2
Mesirow Financial Capital Partners IX, L.P.	Co-Investment	2005	\$3.0	\$0.1	-7.2%	0.6x	8.0%	2
Mesirow Financial Private Equity Fund VII-A, L.p.	Fund of Funds	2018	\$7.5	\$2.4	27.6%	1.8x	28.2%	2
NYLCAP Select Manager Fund, L.P.	Fund of Funds	2008	\$10.0	(\$3.7)	15.1%	1.7x	12.9%	2
PineBridge PEP V Europe, L.P.	Fund of Funds	2008	\$10.0	\$1.1	5.7%	1.5x	12.9%	2
Total			\$90.0	\$4.2				

<sup>&</sup>lt;sup>1</sup> The net IRRs for Private Equity Managers are stated as of 03/31/22 <sup>2</sup> Based on Preqin Fund of Funds peer data as of 03/31/22

<sup>&</sup>lt;sup>3</sup> PineBridge PEP V Europe, L.P. data is reported as of 12/31/2021

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Credit Risk: Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security.)

**Duration:** Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately 3% for each 1% decrease in its yield to maturity. Conversely, the price will decrease 3% for each 1% increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.

**Information Ratio:** This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

Jensen's Alpha: A measure of the average return of a portfolio or investment in excess of what is predicted by its beta or "market" risk. Portfolio Return- [Risk Free Rate+Beta\*(market return-Risk Free Rate)].

**Market Capitalization:** For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest 65% of the broad domestic equity market as large capitalization, the next 25% of the market as medium capitalization, and the smallest 10% of stocks as small capitalization.

Market Weighted: Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

Maturity: The date on which a loan, bond, mortgage, or other debt/security becomes due and is to be paid off.

**Prepayment Risk:** The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

Price-Book Value (P/B) Ratio: The current market price of a stock divided by its book value per share. Meketa Investment Group calculates P/B as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.



**Price-Earnings (P/E) Ratio:** A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about is future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

**Quality Rating:** The rank assigned a security by such rating services as Fitch, Moody's, and Standard & Poor's. The rating may be determined by such factors as (1) the likelihood of fulfillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, AA, A, BBB) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

Sharpe Ratio: A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

STIF Account: Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.

**Standard Deviation:** A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

**Style:** The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

Tracking Error: A divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark, as defined by the difference in standard deviation.



Yield to Maturity: The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a "basis book." For example, a 5% bond pays \$5 a year interest on each \$100 par value. To figure its current yield, divide \$5 by \$95-the market price of the bond-and you get 5.26%. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay \$100 for the bond that can be bought now for \$95. In other words, the bond is selling at a discount of 5% below par value. To figure yield to maturity, a simple and approximate method is to divide 5% by the five years to maturity, which equals 1% pro rata yearly. Add that 1% to the 5.26% current yield, and the yield to maturity is roughly 6.26%.

5% (discount)=1% pro rata, plus5 (yrs. to maturity)5.26% (current yield)

= 6.26% (yield to maturity)

Yield to Worst: The lowest potential yield that can be received on a bond without the issuer actually defaulting. The yield to worst is calculated by making worst-case scenario assumptions on the issue by calculating the returns that would be received if provisions, including prepayment, call, or sinking fund, are used by the issuer.

**NCREIF Property Index (NPI):** Measures unleveraged investment performance of a very large pool of individual commercial real estate properties acquired in the private market by tax-exempt institutional investors for investment purposes only. The NPI index is capitalization-weighted for a quarterly time series composite total rate of return.

NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE): Measures the investment performance of 28 open-end commingled funds pursuing a core investment strategy that reflects funds' leverage and cash positions. The NFI-ODCE index is equal-weighted and is reported gross and net of fees for a quarterly time series composite total rate of return.

Sources: Investment Terminology, International Foundation of Employee Benefit Plans, 1999. The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991

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Throughout this report, numbers may not sum due to rounding.

Returns for periods greater than one year are annualized throughout this report.

Values shown are in millions of dollars, unless noted otherwise.