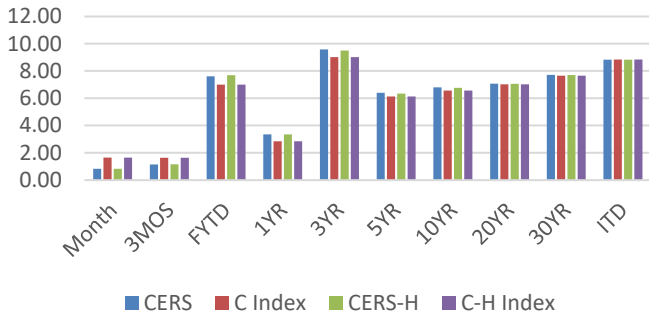


C & CH Pension Performance - 04/30/23

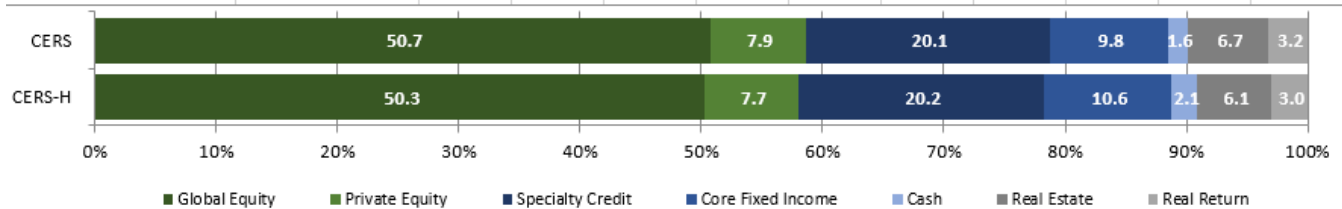


CERS & CERS-HAZ - PENSION FUND PLAN NET RETURNS - 04/30/23

Plan	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
CERS	8,497,744,543.04	0.83	1.14	7.60	3.35	9.58	6.40	6.79	7.06	7.71	8.82
KY Ret. CKERS Plan IPS Index		1.65	1.64	7.00	2.84	9.01	6.13	6.56	7.02	7.65	8.84
CERS- H	2,931,346,109.02	0.83	1.15	7.69	3.35	9.49	6.34	6.76	7.05	7.70	8.82
KY Ret. CERS Haz Plan IPS Index		1.65	1.64	7.00	2.84	9.01	6.13	6.56	7.02	7.65	8.84

KPPA PENSION FUND UNIT - NET RETURNS - 04/30/23 - PROXY PLAN ASSET PERFORMANCE

Structure	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
PUBLIC EQUITY	1.27	1.25	12.94	3.24	12.49	6.67	7.83	8.05	8.43	10.13
MSCI ACWI	1.44	1.57	11.33	2.06	11.98	6.48	7.63	7.99	8.22	9.96
PRIVATE EQUITY	-0.16	1.29	-4.69	-3.27	15.57	13.70	13.35	12.51		11.74
Russell 3000 + 3%(Qtr Lag)	6.94	6.73	-6.53	-5.24	12.53	12.14	15.49	12.23		11.87
SPECIALTY CREDIT	0.63	2.12	5.83	4.33	7.52	5.37				5.64
50% BB US HY / 50% SP LSTA Leveraged Loan	1.03	1.19	8.41	2.39	6.05	3.56				3.59
CORE FIXED INCOME	0.48	0.75	1.87	0.93	0.67	2.44				2.50
Bloomberg Barclays US Aggregate	0.61	0.49	0.51	-0.43	-3.15	1.18				1.69
CASH	0.32	0.92	2.63	2.79	1.01	1.51	1.14	1.67	2.70	3.31
Citigroup Treasury Bill-3 Month	0.40	1.15	2.87	2.99	1.06	1.45	0.89	1.27	2.31	2.91
REAL ESTATE	-0.10	-1.92	-0.60	4.50	11.54	11.37	10.27	8.39	6.69	6.73
NCREIF NFI-ODCE Net 1 Qtr in Arrears Index^	0.00	-5.17	-0.55	6.55	8.97	7.72	9.11	7.40	7.72	6.59
REAL RETURN	0.77	0.68	10.81	9.45	12.16	5.98	3.80			4.74
US CPI +3%	0.57	2.41	5.75	7.99	12.39	6.12	3.99			4.09



CERS PEN Relative Weights



CERS-HAZ PEN Relative Weights



CERS INS & CERS HAZ INS - INSURANCE FUND - PLAN NET RETURNS - 04/30/23												
Plan	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD	
CERS INS	3,193,740,836.13	0.83	1.19	7.76	3.56	9.41	6.31	6.70	6.89	6.82	7.33	
KY Ins. CERS Plan IPS Index		1.65	1.64	7.00	2.84	8.66	5.90	6.53	7.14	7.04	7.52	
CERS - H INS	1,575,149,021.41	0.81	1.19	7.51	3.43	9.46	6.39	6.76	6.93	6.84	7.35	
KY Ins. CERS Haz Plan IPS Index		1.65	1.64	7.00	2.84	8.66	5.90	6.53	7.14	7.04	7.53	

KPPA INSURANCE FUND UNIT - NET RETURNS - 04/30/23 - PROXY PLAN ASSET PERFORMANCE												
Structure		Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD	
PUBLIC EQUITY		1.23	1.15	12.82	3.20	12.49	6.64	7.88	7.95		8.47	
MSCI ACWI		1.44	1.57	11.33	2.06	11.95	6.44	7.62	7.68		8.25	
PRIVATE EQUITY		0.13	2.12	-0.39	2.42	16.30	13.68	14.38	12.06		10.93	
Russell 3000 + 3%(Qtr Lag)		6.94	6.73	-6.53	-5.24	12.53	12.14	15.49	12.03		11.43	
SPECIALTY CREDIT		0.66	2.09	5.96	4.55	7.48	5.29				5.49	
50% BB US HY / 50% SP LSTA Leveraged Loan		1.03	1.19	8.41	2.39	6.05	3.56				3.59	
CORE FIXED INCOME		0.49	0.74	1.79	0.85	0.54	2.26				2.21	
Bloomberg Barclays US Aggregate		0.61	0.49	0.51	-0.43	-3.15	1.18				1.69	
CASH		0.32	0.93	2.62	2.78	1.00	1.40	0.96	1.50		2.44	
Citigroup Treasury Bill-3 Month		0.40	1.15	2.87	2.99	1.06	1.45	0.89	1.27		2.34	
REAL ESTATE		-0.08	-2.04	-0.78	4.08	11.36	11.32	10.27			9.90	
NCREIF NFI-ODCE Net 1 Qtr in Arrears Index*		0.00	-5.17	-0.55	6.55	8.97	7.72	9.11			6.52	
REAL RETURN		0.64	0.88	8.72	8.14	11.00	5.75	3.56			4.47	
US CPI +3%		0.57	2.41	5.75	7.99	11.65	6.12	4.04			4.14	

