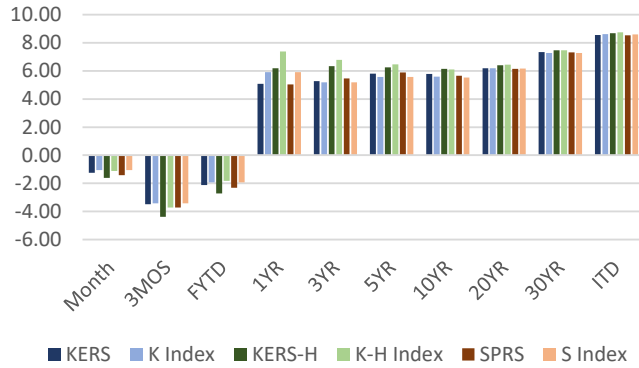


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KPPA MONTHLY PERFORMANCE UPDATE

KERS/KERS-H/SPRS

K,KH,S Pension Performance - 10/31/23

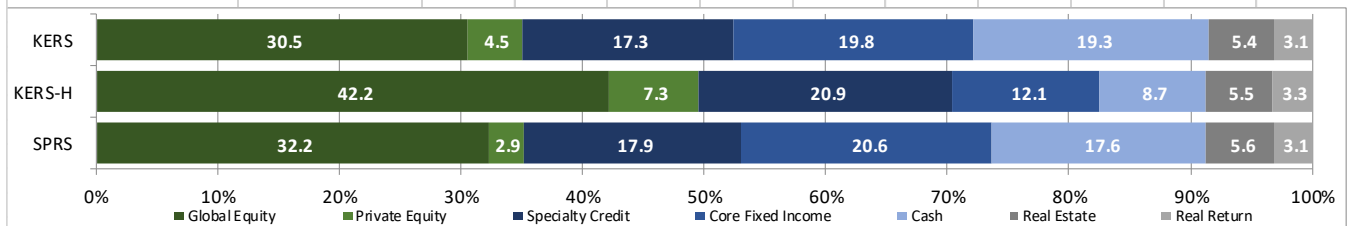


KERS, KERS-HAZ, & SPRS - PENSION FUND - PLAN NET RETURNS - 10/31/23

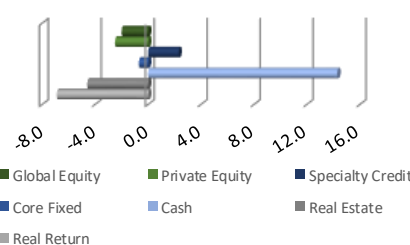
Plan	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
KERS	3,592,151,591.34	-1.24	-3.48	-2.12	5.07	5.27	5.81	5.78	6.18	7.33	8.56
KY Ret. KERS Plan IPS Index		-1.06	-3.43	-1.93	5.90	5.18	5.56	5.58	6.18	7.28	8.61
KERS- H	882,187,857.24	-1.61	-4.38	-2.72	6.19	6.33	6.26	6.15	6.39	7.47	8.67
KY Ret. KERS Haz Plan IPS Index		-1.13	-3.72	-1.82	7.38	6.78	6.47	6.10	6.45	7.47	8.75
SPRS	578,051,284.02	-1.41	-3.71	-2.31	5.04	5.46	5.89	5.65	6.15	7.31	8.54
KY Ret. SPRS Plan IPS Index		-1.06	-3.43	-1.93	5.90	5.18	5.56	5.53	6.16	7.27	8.60

KPPA PENSION FUND UNIT - NET RETURNS - 10/31/23 - PROXY PLAN ASSET PERFORMANCE

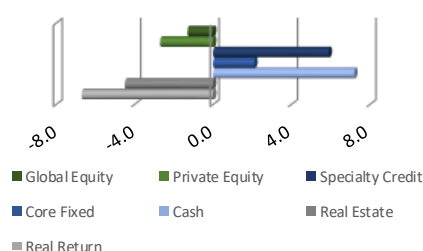
Structure	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
PUBLIC EQUITY	-3.53	-10.45	-7.43	8.76	6.12	7.03	6.48	6.87	8.20	9.90
MSCI ACWI	-3.01	-9.62	-6.31	10.50	6.48	7.08	6.50	6.88	7.99	9.78
PRIVATE EQUITY	-0.01	2.66	2.70	5.64	17.31	13.35	13.41	11.81		11.76
Russell 3000 + 3%(Qtr Lag)	3.67	11.63	13.14	15.65	16.17	14.47	15.35	12.26		12.28
SPECIALTY CREDIT	0.14	2.01	2.79	8.83	6.99	5.90				5.85
50% BB US HY / 50% Morningstar LSTA Lev'd Ln	-0.59	0.02	1.35	9.06	3.62	3.79				3.75
CORE FIXED INCOME	-1.14	-2.77	-2.27	1.45	-1.56	1.71	1.97			2.09
Bloomberg US Aggregate	-1.58	-4.69	-4.76	0.36	-5.57	-0.06	0.88			0.99
CASH	0.48	1.26	1.60	4.17	1.76	1.78	1.32	1.75	2.72	3.32
FTSE Treasury Bill-3 Month	0.47	1.39	1.86	4.94	1.94	1.80	1.16	1.38	2.36	2.94
REAL ESTATE	-1.01	-2.39	-3.61	-9.40	9.83	8.90	9.22	7.91	6.48	6.49
NCREIF NFI-ODCE Net 1 Qtr in Arrears Index^	0.00	-2.88	-2.88	-10.73	7.04	5.56	7.77	6.86	7.53	6.33
REAL RETURN	0.29	2.22	5.01	9.54	13.84	7.94	4.94			5.11
US CPI +3%	0.49	1.61	2.18	6.70	12.85	7.38	4.12			4.20



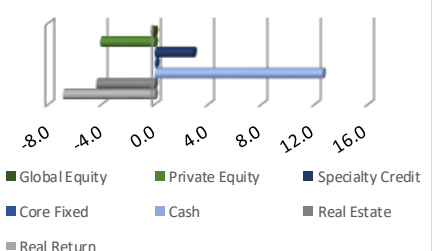
KERS PEN Relative Weights



KERS-HAZ PEN Relative Weights



SPRS PEN Relative Weights



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KPPA MONTHLY PERFORMANCE UPDATE

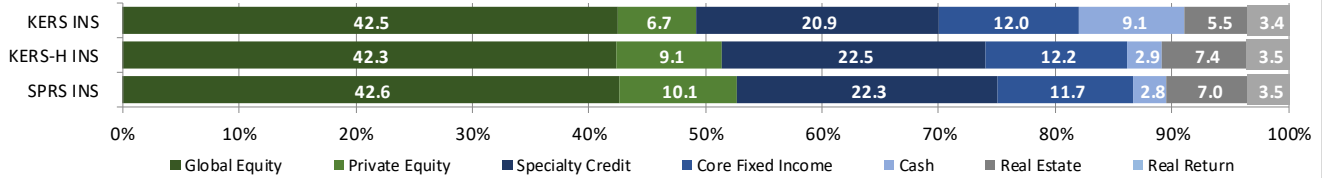
KERS/KERS-H/SPRS

KERS INS, KERS-HAZ INS, SPRS INS - INSURANCE FUND - PLAN NET RETURNS - 10/31/23

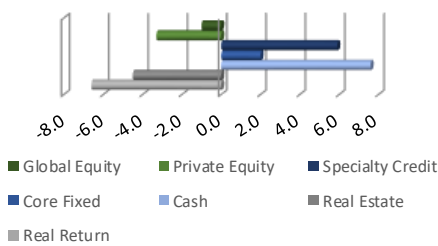
Plan	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
KERS INS	1,435,396,925.95	-1.70	-4.64	-2.98	5.92	6.31	6.19	5.86	6.16	6.46	7.10
KY Ins. KERS Plan IPS Index		-1.13	-3.72	-1.82	7.38	6.72	6.41	6.09	6.40	6.87	7.45
KERS - H INS	594,734,264.94	-1.65	-4.33	-2.71	5.91	6.76	6.36	6.16	6.33	6.58	7.20
KY Ins. KERS Haz Plan IPS Index		-1.13	-3.72	-1.82	7.38	6.78	6.28	6.07	6.39	6.86	7.45
SPRS INS	238,339,427.10	-1.68	-4.42	-2.78	6.09	6.89	6.55	6.34	6.42	6.64	7.25
KY Ins. SPRS Plan IPS Index		-1.13	-3.72	-1.82	7.38	6.78	6.28	6.09	6.40	6.87	7.45

KPPA INSURANCE FUND UNIT - NET RETURNS - 10/31/23 - PROXY PLAN ASSET PERFORMANCE

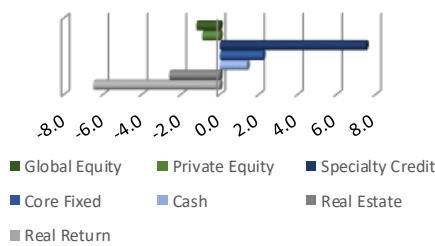
Structure	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
PUBLIC EQUITY	-3.55	-10.49	-7.48	8.62	6.09	6.99	6.54	6.85		8.21
MSCI ACWI	-3.01	-9.62	-6.31	10.50	6.46	7.06	6.51	6.69		8.05
PRIVATE EQUITY	-0.01	3.16	3.19	6.15	19.98	13.03	14.39	11.32		10.95
Russell 3000 + 3%(Qtr Lag)	3.67	11.63	13.14	15.65	16.17	14.47	15.35	11.98		11.84
SPECIALTY CREDIT	0.17	2.11	2.92	9.09	7.12	5.88				5.75
50% BB US HY / 50% Morningstar LSTA Lev'd Ln	-0.59	0.02	1.35	9.06	3.62	3.79				3.75
CORE FIXED INCOME	-1.15	-2.86	-2.40	1.33	-1.72	1.52	1.67			1.80
Bloomberg US Aggregate	-1.58	-4.69	-4.76	0.36	-5.57	-0.06	0.88			0.99
CASH	0.48	1.27	1.59	4.16	1.74	1.66	1.18	1.59		2.48
FTSE Treasury Bill-3 Month	0.47	1.39	1.86	4.94	1.94	1.80	1.16	1.38		2.39
REAL ESTATE	-0.98	-2.32	-3.43	-9.52	9.54	8.84	9.55			9.11
NCREIF NFI-ODCE Net 1 Qtr in Arrears Index^	0.00	-2.88	-2.88	-10.73	7.04	5.56	7.77			5.82
REAL RETURN	0.33	2.23	4.53	9.00	12.57	7.69	4.74			4.85
US CPI +3%	0.49	1.61	2.18	6.70	12.02	7.38	4.18			4.25



KERS Insurance Relative Weights



KERS-HAZ Insurance Relative Weights



SPRS Insurance Relative Weights

