

KENTUCKY RETIREMENT SYSTEMS
Management and Performance Fees
For the Fiscal Year ended June 30, 2020
Unaudited

PUBLIC EQUITY

US Public Equity

Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
INTERNAL MID CAP	123,477,972			55,966,442		
INVESCO	47,257					
NEXT CENTURY GROWTH	69,391,774	368,055		31,544,404	167,295	
NTGI STRUCTURED	177,357,991	184,743		78,311,799	132,731	
RIVER ROAD				601		
RIVER ROAD FAV	172,734,595	454,352		79,215,754	207,202	
S&P 500 INDEX	1,428,219,750			630,916,607		
SCIENTIFIC BETA	275,436,259			121,141,029		
SYSTEMATIC				2,588		
TRANSITION ACCOUNT	38,525			1,732		
WESTFIELD CAPITAL	183,186,295	793,951		83,918,643	341,845	
Subtotal	\$ 2,429,890,419	\$ 1,801,101	\$ -	\$ 1,081,019,599	\$ 849,073	\$ -

Non-US Public Equity

Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
AMERICAN CENTURY	343,750,523	1,506,935		154,358,002	659,119	
BLACKROCK ACWI-EX	712,253,929	397,420		320,683,243	182,047	
BLACKROCK ACWI-EX SC (Insurance ONLY)				33,323,406	39,422	
BOSTON CO				680		
FRANKLIN TEMPLETON	274,773,456	1,057,332		112,698,637	457,410	
LAZARD ASSET MGMT	395,358,497	773,437		172,327,315	330,717	
LSV ASSET MGMT	341,542,873	2,366,685		156,448,258	1,008,371	
NON-US TRANS ACCT	1,248,535			510,616		
NTGI INTL SM CAP (Pension ONLY)	74,832,381	68,035				
PYRAMIS	3,479			1,148		
Subtotal	\$ 2,143,763,672	\$ 6,169,844	\$ -	\$ 950,351,305	\$ 2,677,086	\$ -

Emerging Markets

Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
JP MORGAN EMERGING MARKETS	138,602,212	628,248		60,869,616	278,360	
PZENA EMERGING MARKETS	127,509,370	494,138		57,358,459	229,678	
Subtotal	\$ 266,111,582	\$ 1,122,385	\$ -	\$ 118,228,075	\$ 508,038	\$ -
Total	\$ 4,839,765,673	\$ 9,093,331	\$ -	\$ 2,149,598,979	\$ 4,034,197	\$ -

FIXED INCOME

Core Fixed Income						
Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
BNY IG CREDIT FI UNIT		134,368			50,311	
IG CREDIT FI UNIT	6			9		
LOOMIS CORE FIXED INCOME	533,983,679	342,941		189,502,997	124,009	
LORD ABBETT	1,823,469,465	1,394,629		683,186,304	578,471	
NISA	192,185,940	712,633		129,761,069	300,030	
Subtotal	\$ 2,549,639,090	\$ 2,584,572	\$ -	\$ 1,002,450,378	\$ 1,052,821	\$ -
Specialty Fixed Income						
Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
ADAMS ST SPC II A1	12,173,804			5,217,345		
ADAMS ST SPC II B1	12,173,805			5,217,345		
BSP COINVEST	12,108,708	663,074		6,321,591		
BSP PRIVATE CREDIT FUND	71,888,876			35,944,438	331,536	
CAPITAL SPRINGS	47,581,524			20,392,081		
CERBERUS KRS LP	122,104,668	2,736,551	1,160,665	52,330,572	1,172,809	497,428
COLUMBIA	399,980,905	1,321,361		146,065,575	376,815	
H/2 CREDIT PARTNER	68,782,228			26,748,644		
LOOMIS	37,403			37,901		
MANULIFE ASSET MGMT	333,843,276	1,000,427		139,902,348	419,593	
MARATHON BLUEGRASS	347,395,378	2,908,241	(3,867,317)	137,097,767	1,142,556	(1,420,981)
MESA WEST CORE LEND	59,718,504	596,064		39,793,975	377,298	
MESA WEST IV	22,209,726	555,780	98,368	8,634,245	216,136	38,254
SHENKMAN CAP	189,115,463	882,416		106,725,023	464,975	
WATERFALL	212,161,726	2,402,645		102,963,636	1,178,527	
WHITE OAK YIELD SPECTRUM FUND	135,249,706	825,058	932,521	63,652,673	408,415	466,260
Subtotal	\$ 2,046,525,699	\$ 13,891,617	\$ (1,675,763)	\$ 897,045,160	\$ 6,088,658	\$ (419,039)
Total	\$ 4,596,164,789	\$ 16,476,189	\$ (1,675,763)	\$ 1,899,495,538	\$ 7,141,479	\$ (419,039)

OPPORTUNISTIC						
Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
ARROWMARK	327,917,481		2,469,724	166,977,601		1,257,599
Total	\$ 327,917,481	\$ -	\$ 2,469,724	\$ 166,977,601	\$ -	\$ 1,257,599

ABSOLUTE RETURN						
Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
BLACKSTONE STRAT OPP	1,994,655			786,122		
CREDIT SUISSE		10,434	8,271		4,334	3,435

GOTHAM NEUTRAL STRATEGIES	12,060,233	118,082		5,009,194	44,446	
GOVERNORS LANE ONSHORE FUND	253,314	150,534	5,804	105,213	62,524	2,411
LIQUIDALTS H2O FORCE	13,253,288			5,567,965		
LUXOR CAPITAL	1,005,124			335,041		
MYRIAD OPPORTUNITIES	39,652,516	414,917		15,791,365	165,262	
PAAMCO	7,095			1,910		
PINE RIVER	129,754	968		43,251	323	
PRISMA CAPITAL	98,127,055			40,764,743		
SRS PARTNERS US	8,906,268	109,781	156,750	3,510,110	43,267	61,778
TRICADIA SELECT	3,564,792	1,892		1,404,944	746	
Total	\$ 178,954,093	\$ 806,608	\$ 170,824	\$ 73,319,858	\$ 320,901	\$ 67,623

PRIVATE EQUITY						
Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
ARBOR INVST II	70,166		237,260	7,797		26,362
ARCANO FUND	23,313,640	177,512	5,011	2,590,406	19,724	1,717
ARES SSF IV	21,765,569	287,129		11,514,760	151,370	
BAY HILLS EM PTNR I	8,923,050		1,143,345	991,451		127,037
BAY HILLS EM PTNR II	80,822,637	58,518	1,997,698	8,980,293	6,502	221,966
BAY HILLS EM PTNR III	57,529,752	544,202	1,374,740	49,211,322	464,825	1,174,222
BAY HILLS II B	64,595,840	69,500	1,522,084	7,177,314	7,721	169,120
BDCM OPPT FD IV	36,917,635	604,752		25,338,075	415,066	
BLACKSTONE CAP V	2,161,313		(784,503)	568,464		(206,062)
BLACKSTONE CAP VI	29,469,334	170,819	(3,097,344)	19,646,221	113,871	(2,236,697)
CM GROWTH I	8,144,591			904,954		
COLUMBIA CAP EQ IV	3,323,577			369,287		
CRESTVIEW PTNRS II	22,845,195	290,008	(850,645)	2,538,347	32,221	(94,516)
CRESTVIEW PTNRS III	20,679,689	432,741	(982,667)	11,135,199	233,011	(78,575)
CVC CAPITAL PARTNERS VI	27,348,163	276,389		14,450,705	146,043	(18,387)
DAG VENTURES II QP	2,075,747			230,630		
DAG VENTURES III QP	2,642,535			293,602		
DAG VENTURES IV QP	48,508,228			5,389,803		
DAG VENTURES V QP	6,032,731	70,000		5,278,634	61,250	(357,283)
DB PRIVATE EQUITY	17,259,584	175,343	137,624	51,778,753	655,468	511,870
DCM VI LP	10,918,222			1,213,136		(2,974)
ESSEX WOOD HLTH VIII	9,506,605	255,406		2,112,578	56,758	
GREEN EQTY INVST IV						
GREEN EQTY INVST V	30,067,967	9,677		3,340,885	1,076	
GREEN EQTY INVST VI	32,141,939	110,160	(624,461)	28,124,209	96,391	(546,402)
GREEN EQUITY INV VII	23,787,331	55,064	(559,301)	23,787,330	55,064	(559,301)
GTCR IX LP						
H & F SPOCK I, LP (KRONOS)	5,939,114			2,227,165		

HARVEST PARTNERS V	131,288		7,066	14,587		(39,340)
HARVEST PARTNERS VI	11,251,758		246,545	4,595,790		271,375
HARVEST PARTNERS VII	18,069,509	35,067	36,823	18,069,509	35,067	36,823
HELLMAN FRIEDMAN VI	744,426		(94,732)	279,177		(29,431)
HIG BIOVENTURES II	15,792,366	188,138	1,107,388	13,452,758	160,265	943,330
HIG CAP PTNRS V	12,884,776	194,578	442,762	6,786,639	102,487	233,210
HIG VENTURE PTNR II	5,687,951		(87,214)	631,994		(9,690)
HORSLEY BRDG INTL V	80,974,303	393,752		8,997,145	43,748	
INST VEN PTRN XII	5,536,767			615,060		
JW CHILDS EQUITY III	20,675			2,299		
KAYNE ANDERSON	14,411,020	498,219	(3,008,267)	14,411,020	831,641	(2,812,043)
KCP IV CO-INVEST	5,139,454		14,334	3,527,417		9,838
KEYHAVEN CAPITAL III	18,254,986		(402)	2,028,330		(45)
KEYHAVEN CAPITAL IV	5,241,533		237,140	3,597,477		162,760
LEVINE LEICHTMAN CAP PTRNS V	40,103,874	539,676	(2,499,213)	20,923,761	357,319	(494,463)
LEVINE LEICHTMAN FUND VI	12,605,975	464,628	322,947	12,605,974	464,628	322,947
MATLINPATTERSON II	1,469,392			163,265		
MATLINPATTERSON III	5,752,660	18,196		639,244	2,021	
MERIT MEZZ FD IV	196,154			21,795		
MHR INST PTNRS III				952,570	16,350	279,414
MIDDLE GROUND	16,500,241	809,660		8,250,121	404,832	
MILL ROAD CAPITAL	6,599,002			733,223		
NEW MTN PTNRS II LP	389,597		7,300	77,923		1,460
NEW MTN PTNRS III LP	21,675,831	(1,213)	176,811	4,816,844	(270)	39,291
NEW MTN PTRNS IV LP	24,961,932	141,853	1,750,690	13,089,792	74,383	918,047
OAK HILL CAP PT II	856,157	12,471	7,547	94,561	2,340	2,381
OAK HILL CAP PT III	5,385,132	59,432	(51,555)	1,994,492	22,012	(44,964)
OCM OPPTS FD VIIB				16,655	303	(152)
RIVERSIDE APPREC VI	17,604,304	382,121	(51,856)	9,279,419	307,213	399,485
STRATEGIC VALUE IV	24,391,928	292,272	494,805	12,224,139	146,477	247,974
SUN CAP PTRNS				221,658		
TCV VI				339,392		
TRITON FUND IV	12,651,692	283,505	804,414	6,668,981	149,441	424,024
VANTAGEPOINT 2006	6,048,159	148,617		672,020	12,895	
VANTAGEPOINT IV	2,213,111			245,901		
VISTA EQ PTNR FD III	3,582,299	15,596	(547,255)	398,040	(1)	(60,811)
VISTA EQ PTNR FD IV	15,615,567	88,195	(1,060,616)	13,302,152	112,693	(903,487)
VISTA EQ PTNR FD VI	28,985,962	175,187	247,447	28,985,962	175,187	247,447
WARBURG PINCUS PE IX	1,917,909	(1,100)	(61,613)	383,582	(220)	(12,323)
WARBURG PINCUS PE X	5,185,101	41,591	(422,414)	1,003,552	8,048	(226,050)
WAYZATA OPPTS FD II	913,667			101,519		
WAYZATA OPPTS FD III	5,346,726	62,173		2,818,327	48,389	
Total	\$ 1,051,883,339	\$ 8,429,833	\$ (2,462,277)	\$ 497,235,387	\$ 5,993,610	\$ (1,960,894)

REAL ESTATE						
Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
BARING REAL ESTATE	48,280,271			20,691,543		
DIVCOWEST IV	2,809,191	39,504	149,741	1,242,531	17,473	
FUNDAMENTAL PARTNERS III	59,365,485	975,718	2,414,719	25,442,353	418,165	1,034,880
GREENFIELD ACQ VI	542,643	197,424	(159,634)	238,510	86,774	(70,164)
GREENFIELD ACQ VII	18,915,638	397,497	114,498	8,301,110	174,441	167,416
HARRISON STREET	83,940,909	621,612		39,733,931	289,806	
L-A VII	26,946,940	272,455		11,825,634	119,567	
LUBERT ADLER RE VIIB	31,774,402	228,483	851,276	13,617,601	100,211	364,833
PATRON CAPITAL	18,589,057	539,514		7,229,276	209,811	
PROLOGIS TUSL ¹	149,813,961	749,587	1,899,217	57,991,372	287,646	743,457
RUBENSTEIN PF II	17,011,659	262,730		7,524,387	116,209	
STOCKBRIDGE SM/MKTS	87,817,888	755,933		41,522,084	352,163	
WALTON ST RE FD VI	11,282,426	136,889		1,253,603	15,210	
WALTON ST RE FD VII	8,923,004	404,687		3,921,955	177,873	
Total	\$ 566,013,474	\$ 5,582,034	\$ 5,269,817	\$ 240,535,890	\$ 2,365,350	\$ 2,240,422

¹Performance and Manager fee error found in 8/2020. Adjustments done for FY19 & FY20.

REAL RETURN						
Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
AMERRA AGRI FUND II	24,582,383	142,922	1,003,482	9,914,108	76,430	415,448
AMERRA AGRI HOLDINGS	49,210,676	886,257		26,498,059	477,216	
BTG PACTUAL	22,961,217	422,643		10,315,909	189,883	
IFM INFRASIT DEBT FUND	45,091,708	131,308		19,325,017	56,275	
INTERNAL TIPS	127,957			271,657		
MAGNETAR MTP EOF II	21,781,630	424,162	(937,980)	7,260,543	141,388	(312,660)
NUVEEN REAL ASSET INCOME	(235,042)	1,213,183		(120,427)	484,877	
OBERLAND CAPITAL	7,622,075	226,917	50,054	3,424,413	101,949	22,488
PIMCO ALL ASSET						
PUTNAM	453,690,855			201,657,740		
TAURUS MINE FINANCE	23,595,587	402,982	(1,520,969)	10,411,356	177,813	172,771
TORTOISE CAPITAL	92,483,363	277,859		29,251,361	87,921	
TPF II	774,498			86,058		
Total	\$ 741,686,907	\$ 4,128,235	\$ (1,405,413)	\$ 318,295,794	\$ 1,793,752	\$ 298,047

Total Assets and Fees under Management	\$ 12,302,385,755	\$ 44,516,230	\$ 2,366,912	\$ 5,345,459,047	\$ 21,649,288	\$ 1,483,758
Fees in Basis Points (Annualized for Mgmt. Fees)		0.36%	0.02%		0.41%	0.03%

NOTE:

Management Fee - *Management Fees is a fee to compensate investment managers for their time and expertise used to invest KRS funds. The fees typically range from 1%-4% per annum with 2% being the standard.*

Performance/Incentive fee - *a fee charged by the manager for generating returns that exceed the expected rate of return. The standard fee is typically 20% of the amount exceeding the expected rate of return.*

Carried Interest - *a fee charged share of the profits of an investment fund in excess of the amount that the manager contributes to the partnership. The standard fee is typically around 20%*

Fees reported for Private Equity and Real Estate may appear high depending on the investment stage. Management Fees are often charged on committed capital; therefore, during the early phase of raising capital, fees may appear to be high because all the capital has not been called for investment.