

Teachers' Retirement System of the State of Kentucky
Retirement Annuity Trust
Quarterly Investment Performance
Net of Management Fee Returns
For the Period Ended March 31, 2021

FINAL

	<u>Market Value</u>	<u>Last Qtr</u>	<u>FYTD</u>	<u>1-Year</u>	<u>3-Year*</u>	<u>5-Year*</u>	<u>10-Year*</u>	<u>20-Year*</u>
TOTAL PLAN	\$ 24,532,406,316.84	3.36	22.87	40.45	11.49	11.98	9.61	7.22
<i>Policy Benchmark</i>		3.75	21.51	37.67	11.30	11.63	9.40	-
<u>Total Equity</u>	\$ 15,199,959,226.98	5.80	35.52	68.29	14.87	15.83	-	-
<u>Domestic Equity</u>	\$ 9,995,248,332.67	7.69	36.97	70.61	17.03	16.89	-	-
<i>S&P 1500 Index</i>		6.91	31.43	58.73	16.47	16.15	-	-
<u>All-Cap Equities</u>	\$ 519,600,958.58	10.03	41.01	70.25	18.98	-	-	-
<i>Russell 3000 Index</i>		6.35	33.19	62.53	17.12	-	-	-
Fort Washington Focused Equity	\$ 519,600,958.58	10.03	41.01	70.25	18.98	-	-	-
<u>Large-Cap Equities</u>	\$ 8,080,654,912.56	7.16	35.21	68.77	17.29	17.01	-	-
<i>S&P 500 Index</i>		6.17	29.71	56.35	16.78	16.29	-	-
Todd Asset Large Cap Intrinsic Value	\$ 1,271,201,161.11	13.05	42.81	77.22	12.06	15.19	-	-
S&P 500 Stock Index	\$ 2,572,945,232.78	6.28	30.25	57.12	17.26	16.71	-	-
UBS Value Oriented (Global)	\$ 958,405,180.12	8.48	38.90	78.79	16.42	16.90	-	-
State Street US Premier Growth Equity	\$ 953,599,188.94	3.60	27.28	61.11	23.13	20.98	-	-
Todd Asset Intrinsic Value Opportunity (Alpha)	\$ 591,700,751.07	15.30	41.53	75.94	12.33	9.84	-	-
UBS Alpha Equity	\$ 398,596,124.85	9.93	39.77	79.03	18.59	18.20	-	-
Wellington Large Cap Equity	\$ 763,365,789.71	4.25	30.69	58.01	18.35	17.72	-	-
Baillie Gifford US Equity Growth	\$ 570,841,483.98	-1.52	54.24	141.42	-	-	-	-
<u>Mid-Cap Equities</u>	\$ 849,152,143.58	8.57	42.53	77.63	14.91	16.12	-	-
<i>S&P 400 Index</i>		13.47	47.86	83.46	13.40	14.37	-	-
S&P 400 Stock Index	\$ 337,742,101.39	13.82	47.86	83.19	13.36	14.44	-	-
Wellington Mid Cap Equity	\$ 511,410,042.19	5.25	39.18	74.17	16.41	17.86	-	-
<u>Small-Cap Equities</u>	\$ 545,840,317.95	12.37	53.90	89.89	13.99	15.70	-	-
<i>S&P 600 Index</i>		18.24	60.18	95.33	13.71	15.60	-	-
Wellington Small Cap Equity	\$ 253,802,785.06	6.56	47.34	83.75	14.33	15.87	-	-
S&P 600 Stock Index	\$ 292,037,532.89	18.32	60.49	95.97	13.74	15.49	-	-

*Teachers' Retirement System of the State of Kentucky
Retirement Annuity Trust
Quarterly Investment Performance
Net of Management Fee Returns
For the Period Ended March 31, 2021*

FINAL

	<u>Market Value</u>	<u>Last Qtr</u>	<u>FYTD</u>	<u>1-Year</u>	<u>3-Year*</u>	<u>5-Year*</u>	<u>10-Year*</u>	<u>20-Year*</u>
<u>International Equity</u>	\$ 5,204,710,894.31	2.26	32.71	63.75	10.99	13.85	-	-
<i>MSCI AC World Ex US</i>		3.60	29.01	50.03	7.02	10.28	-	-
Todd Asset International Intrinsic Value	\$ 929,317,399.07	9.37	38.07	65.08	8.19	10.08	-	-
Baillie Gifford EAFE	\$ 1,673,405,961.85	-2.54	34.85	84.30	19.48	22.42	-	-
UBS All Country World Ex US Equity	\$ 1,128,034,067.49	2.14	33.08	56.02	7.66	11.99	-	-
Barings All Country World Ex US	\$ 763,957,633.00	3.81	23.74	44.33	7.60	10.80	-	-
Black Rock MSCI ACWI Ex US IMI Index	\$ 609,431,784.22	3.83	30.26	53.27	7.11	10.31	-	-
Todd Asset International Intrinsic Value Opportunity	\$ 100,564,048.68	5.60	29.40	53.62	2.92	6.52	-	-
<u>Fixed Income</u>	\$ 3,862,680,341.52	-4.50	-2.84	1.17	5.20	3.70	-	-
<i>Bloomberg Barclays Govt/Credit Index</i>		-4.28	-2.75	0.86	4.99	3.36	-	-
<u>Intermediate</u>		-1.86	-0.78	2.01	4.36	2.75	-	-
<i>Bloomberg Barclays Intermediate Govt/Credit Index</i>								
Intermediate Bond	\$ 563,555,588.58	-2.27	-1.19	2.36	4.03	2.60	-	-
<u>Broad</u>		-4.28	-2.75	0.86	4.99	3.36	-	-
<i>Bloomberg Barclays Govt/Credit Index</i>								
Fort Washington Core Fixed Income	\$ 774,454,551.54	-4.60	-1.64	4.71	5.73	4.23	-	-
Internal Bond	\$ 180,387,755.93	-2.95	-0.37	0.83	5.25	4.00	-	-
Broad Market Bond	\$ 783,039,547.45	-4.37	-3.79	-1.22	4.72	3.44	-	-
403(b) Tax-Sheltered Trust	\$ 307,476.33	0.01	0.03	0.06	1.29	1.04	-	-
Galliard Capital Management Core Fixed Income	\$ 760,825,347.63	-4.09	-1.94	3.28	5.38	3.86	-	-
<u>Long</u>		-6.44	-4.50	-0.12	5.77	4.13	-	-
<i>Hybrid Index</i>								
Long Term Bond	\$ 800,110,074.06	-6.94	-5.33	-1.58	6.02	4.38	-	-

Teachers' Retirement System of the State of Kentucky
Retirement Annuity Trust
Quarterly Investment Performance
Net of Management Fee Returns
For the Period Ended March 31, 2021

FINAL

	<u>Market Value</u>	<u>Last Qtr</u>	<u>FYTD</u>	<u>1-Year</u>	<u>3-Year*</u>	<u>5-Year*</u>	<u>10-Year*</u>	<u>20-Year*</u>
<u>Real Estate</u>	\$ 1,353,236,373.94	1.72	3.65	3.14	5.64	7.38	-	-
In House Real Estate Equity	\$ 403,430,071.63	1.07	2.47	4.13	5.02	7.83	-	-
<i>CPI plus 2%</i>		1.74	4.46	4.69	4.04	4.19	-	-
<u>Core Real Estate</u>	\$ 584,795,353.35	1.51	1.70	2.72	5.71	6.31	-	-
<i>NCREIF ODCE (VW) Index</i>		2.09	3.92	2.30	4.88	6.19	-	-
Prudential PRISA	\$ 381,624,961.09	1.28	0.49	1.78	5.05	5.95	-	-
Carlyle Property Investors	\$ 66,533,900.90	2.58	8.62	7.42	7.99	-	-	-
TA Realty Core Property	\$ 136,636,491.36	1.65	2.21	3.59	8.00	-	-	-
<u>Non-Core Real Estate</u>	\$ 365,010,948.96	2.81	7.98	2.34	6.32	8.06	-	-
<i>NCREIF Property Index</i>		1.72	3.64	2.61	4.89	5.81	-	-
Carlyle Realty Partners VI	\$ 3,765,581.00	1.26	-6.09	-19.71	-11.22	-5.00	-	-
Blackstone Partners VII	\$ 19,263,316.11	0.10	-7.94	-19.85	-2.81	2.72	-	-
Rockwood Capital Real Estate Partners IX	\$ 9,560,024.68	1.97	2.60	-28.28	-9.59	0.36	-	-
The Realty Associates X	\$ 5,254,905.00	0.31	-2.12	-8.48	8.80	10.27	-	-
Angelo Gordon Net Lease Realty III	\$ 46,667,250.00	2.62	6.04	7.83	7.05	7.22	-	-
Carlyle Realty Partners VII	\$ 17,946,289.00	1.47	3.72	-1.09	9.38	10.51	-	-
Landmark Real Estate Partners VII	\$ 14,053,207.65	0.65	-3.48	-5.83	-1.44	2.64	-	-
Blackstone Partners VIII	\$ 38,464,074.81	4.88	16.61	8.55	12.14	14.57	-	-
The Realty Associates XI	\$ 49,187,303.00	6.01	12.52	10.59	11.07	-	-	-
Rockwood Capital Real Estate Partners X	\$ 36,928,666.02	2.02	17.72	4.05	5.95	-	-	-
Landmark Real Estate Partners VIII	\$ 17,395,990.13	0.65	-2.62	0.54	0.33	-	-	-
Carlyle Realty Partners VIII	\$ 18,209,565.00	2.62	12.43	14.23	-	-	-	-
Blackstone Partners IX	\$ 19,294,614.73	6.79	24.57	17.37	-	-	-	-
Angelo Gordon Net Lease Realty IV	\$ 13,744,924.00	-0.21	1.88	12.12	-	-	-	-
Rockwood Capital Real Estate Partners XI	\$ 30,287,926.83	-0.51	84.31	-	-	-	-	-
The Realty Associates XII	\$ 24,987,311.00	4.42	15.59	8.45	-	-	-	-

*Teachers' Retirement System of the State of Kentucky
Retirement Annuity Trust
Quarterly Investment Performance
Net of Management Fee Returns
For the Period Ended March 31, 2021*

FINAL

	<u>Market Value</u>	<u>Last Qtr</u>	<u>FYTD</u>	<u>1-Year</u>	<u>3-Year*</u>	<u>5-Year*</u>	<u>10-Year*</u>	<u>20-Year*</u>
<u>Alternative Investments</u>								
<u>Private Equity</u>	\$ 1,356,384,068.92	6.77	22.90	12.77	10.93	11.71	-	-
<u>Mature Private Equity</u>	\$ 665,046,468.69	6.60	21.14	9.78	8.95	8.69	-	-
<i>S&P 500 Index plus 3%</i>		6.96	32.61	61.04	20.28	19.78	-	-
KKR 2006	\$ 6,077,402.00	16.82	34.75	9.03	24.13	17.90	-	-
KKR European III	\$ 2,943,682.00	3.75	52.85	-0.66	4.09	9.52	-	-
Riverstone/Carlyle E&P IV	\$ 2,234,651.00	14.65	62.95	-25.24	-17.54	-9.72	-	-
Alinda Infrastructure II	\$ 13,813,624.00	0.11	4.81	-7.42	-6.30	-5.70	-	-
Capital South Partners III	\$ 789,475.64	0.00	4.12	-2.76	1.89	2.12	-	-
Landmark Equity Partners XIV	\$ 4,341,260.00	8.70	0.19	3.79	1.59	0.47	-	-
Lexington Capital Partners VII	\$ 5,644,190.00	9.04	5.79	9.65	8.56	7.74	-	-
Stepstone Pioneer Capital III	\$ 10,641,173.00	0.00	15.38	4.30	8.57	6.65	-	-
Oaktree Mezzanine III	\$ 409,541.00	-10.18	-15.72	-20.20	14.22	13.12	-	-
JP Morgan Maritime	\$ 22,748,866.65	3.91	-7.71	-19.66	-7.89	-10.72	-	-
Audax Mezzanine III	\$ 2,963,444.23	0.00	-4.61	-2.74	9.24	10.94	-	-
Hellman & Friedman VII	\$ 22,910,688.92	7.98	57.91	33.75	29.80	34.53	-	-
Oaktree European Principal III	\$ 17,417,835.00	4.69	12.98	-0.08	2.95	8.17	-	-
NGP Natural Resources X	\$ 6,606,810.00	-9.12	-14.06	-37.90	-27.36	-10.60	-	-
Riverstone E&P V	\$ 7,986,849.00	-3.82	-2.66	-46.43	-32.47	-17.27	-	-
APAX VIII	\$ 17,314,438.25	2.16	70.85	48.65	28.32	21.53	-	-
Actis Global IV	\$ 33,399,866.00	5.44	34.77	11.65	12.65	8.09	-	-
Audax Private Equity IV	\$ 1,695,506.46	0.00	4.51	-3.45	5.12	8.44	-	-
Landmark Equity Partners XV	\$ 12,461,859.83	10.77	1.79	9.09	7.88	10.21	-	-
Fort Washington VIII	\$ 28,035,077.00	9.99	6.19	12.84	12.18	12.49	-	-
Carlyle Global Financial Service Partners II	\$ 12,250,855.00	28.22	60.48	50.91	27.15	22.55	-	-
Public Pension Capital LLC	\$ 83,349,400.26	0.00	15.10	21.69	29.94	21.44	-	-
NGP Natural Resources XI	\$ 32,854,212.00	2.80	2.90	-21.85	-10.07	2.31	-	-
Gavea Investments V	\$ 6,867,198.48	15.12	105.53	67.52	57.34	45.42	-	-
Oaktree Mezzanine IV	\$ 18,307,104.00	2.47	6.77	8.21	8.42	8.20	-	-
Lexington Capital Partners VIII	\$ 22,782,051.00	10.03	12.77	16.50	14.31	14.33	-	-
KKR European IV	\$ 49,500,236.00	9.84	34.54	19.01	22.52	17.47	-	-
IFM Global Infrastructure	\$ 184,805,034.97	4.13	11.14	6.71	10.95	12.62	-	-
Carlyle Europe Partners IV	\$ 33,894,137.00	27.01	43.68	27.67	12.01	11.48	-	-

Teachers' Retirement System of the State of Kentucky
Retirement Annuity Trust
Quarterly Investment Performance
Net of Management Fee Returns
For the Period Ended March 31, 2021

FINAL

	<u>Market Value</u>	<u>Last Qtr</u>	<u>FYTD</u>	<u>1-Year</u>	<u>3-Year*</u>	<u>5-Year*</u>	<u>10-Year*</u>	<u>20-Year*</u>
<u>Private Equity < 5 Years</u>	\$ 691,337,600.23	8.08	28.26	19.36	13.65	14.79	-	-
Audax Private Equity V	\$ 22,347,751.29	0.00	18.27	12.46	14.07	-	-	-
Fort Washington IX	\$ 26,677,386.00	4.77	7.01	13.63	9.84	-	-	-
Fort Washington IX-K	\$ 25,474,591.00	6.36	10.93	18.14	8.41	-	-	-
Hellman & Friedman VIII	\$ 68,934,310.00	7.03	57.84	35.23	15.51	-	-	-
Riverstone E&P VI	\$ 31,111,411.00	7.58	16.67	-28.84	-26.04	-	-	-
Audax Mezzanine IV	\$ 13,370,765.73	0.00	5.93	9.27	7.19	-	-	-
JP Morgan Maritime II	\$ 6,879,290.44	0.16	-0.10	-9.55	-0.11	-	-	-
APAX IX	\$ 75,001,851.04	20.42	57.13	37.62	30.55	-	-	-
Oaktree European Principal IV	\$ 46,298,125.00	10.18	22.28	15.49	7.67	-	-	-
KKR Americas XII	\$ 43,595,477.00	9.08	46.59	39.63	17.43	-	-	-
NGP Natural Resources XII	\$ 26,788,863.00	6.48	19.58	-4.82	-1.28	-	-	-
Carlyle Global Financial Service Partners III	\$ 48,411,954.00	3.80	1.74	-4.43	-	-	-	-
JP Morgan Global Transport Income	\$ 67,186,994.96	1.67	4.99	10.80	-	-	-	-
APAX Digital	\$ 33,580,235.35	12.77	82.83	62.10	-	-	-	-
Landmark Equity Partners XVI	\$ 23,219,785.42	4.90	10.29	22.13	-	-	-	-
Carlyle Asia V	\$ 20,716,611.00	6.62	47.58	10.69	-	-	-	-
Carlyle Europe V	\$ 14,457,258.00	4.00	4.04	-18.18	-	-	-	-
Fort Washington X	\$ 7,462,892.00	7.27	6.14	16.08	-	-	-	-
Audax PE VI-A	\$ 11,091,629.00	0.00	39.02	39.87	-	-	-	-
Fort Washington X-S	\$ 3,524,181.00	5.29	0.57	10.49	-	-	-	-
Oaktree Mezzanine V	\$ 11,547,320.00	1.91	8.83	10.86	-	-	-	-
Lexington Capital Partners IX	\$ 19,182,136.00	10.11	7.08	9.35	-	-	-	-
Oaktree European V	\$ 15,497,685.00	24.33	29.36	23.64	-	-	-	-
KKR European V	\$ 22,372,652.00	3.96	42.65	4.46	-	-	-	-
APAX X	\$ 6,606,445.00	148.23	-	-	-	-	-	-
<u>Timberland</u>	\$ 208,744,972.38	-11.54	-6.58	-5.93	0.11	-0.38	-	-
<i>NCREIF Timberland Index</i>		<i>0.76</i>	<i>1.38</i>	<i>1.46</i>	<i>1.71</i>	<i>2.51</i>	-	-
Hancock Bluegrass LLC - Oregon	\$ 3,488,451.00	0.00	10.59	9.52	4.86	6.65	-	-
Molpus Lake Superior Timberlands (Michigan)	\$ 75,328,298.62	-18.93	-15.38	-15.49	-4.57	-4.42	-	-
Molpus Lake Superior Timberlands (Hiwassee)	\$ 8,563,036.45	-16.10	-13.61	-13.31	3.10	-0.10	-	-
Molpus Seven States	\$ 51,121,009.52	-4.18	-2.28	-1.30	3.05	1.55	-	-
Molpus Lake Superior Timberlands (Magnolia)	\$ 70,244,176.79	-7.52	0.74	2.99	-	-	-	-

*Teachers' Retirement System of the State of Kentucky
Retirement Annuity Trust
Quarterly Investment Performance
Net of Management Fee Returns
For the Period Ended March 31, 2021*

FINAL

	<u>Market Value</u>	<u>Last Qtr</u>	<u>FYTD</u>	<u>1-Year</u>	<u>3-Year*</u>	<u>5-Year*</u>	<u>10-Year*</u>	<u>20-Year*</u>
<u>Additional Categories</u>	\$ 1,795,401,629.21	2.40	12.19	14.59	5.22	6.16	-	-
<i>B of A Merrill Lynch U.S. High Yield Master II Index</i>		0.90	12.50	23.31	6.53	7.94	-	-
<u>Evergreen Funds</u>								
Fort Washington High Yield Bond	\$ 324,835,699.11	0.10	10.76	20.72	5.95	6.90	-	-
Marathon TRS Credit	\$ 397,090,544.60	5.32	15.49	3.05	1.56	5.35	-	-
Shenkman Capital Management	\$ 292,240,998.96	1.18	8.69	19.15	4.42	5.12	-	-
Barings Capital European Loan	\$ 99,670,000.00	4.28	14.46	28.29	5.96	6.35	-	-
Columbia High Yield Bond	\$ 204,343,091.25	0.42	11.09	20.80	6.97	6.77	-	-
Lord Abbett High Yield Bond	\$ 106,475,351.39	1.16	15.39	25.60	-	-	-	-
In House High Yield Bond	\$ 134,178,425.48	-0.47	7.33	14.43	-	-	-	-
<u>Non-Evergreen Funds</u>								
Avenue Special Situations VI	\$ 12,354,952.00	63.76	61.58	55.36	20.30	6.13	-	-
Oaktree Opportunities IX	\$ 34,006,821.00	7.13	24.58	-3.44	3.86	6.16	-	-
Highbridge Specialty Loan III	\$ 1,921,318.11	-9.61	-11.80	-13.73	-2.53	0.77	-	-
Oaktree European Dislocation	\$ 1,540,749.00	-15.48	-15.14	-20.40	-18.77	-6.26	-	-
Marathon European Credit Opportunities II	\$ 15,255,393.78	0.28	-4.24	-3.71	4.63	7.86	-	-
Oaktree Opportunities X	\$ 22,407,665.00	4.79	11.32	2.21	4.24	14.90	-	-
Oaktree European Capital Solutions	\$ 28,548,352.00	8.06	22.43	21.79	12.68	13.07	-	-
Marathon European Credit Opportunities III	\$ 87,019,108.53	1.03	5.36	5.89	9.61	9.73	-	-
Oaktree Opportunities X(b)	\$ 33,513,159.00	5.73	33.36	8.85	-	-	-	-
<u>Short Term</u>								
Cash (Unallocated)	\$ 755,999,703.89	0.01	0.03	0.06	1.36	1.14	-	-
<i>90 Day T-Bill</i>		0.02	0.09	0.12	1.49	1.18	-	-

*Returns are annualized for periods longer than one year

** Prior to July 1, 2008, TRS did not benchmark overall fund performance. Effective July 1, 2008, the Board of Trustees approved a Policy Index that represents the returns of appropriate benchmarks for the various asset classes weighted by the mid-point of the strategic range for the current fiscal year.