

*Teachers' Retirement System of the State of Kentucky
Retirement Annuity Trust
Quarterly Investment Performance
Gross 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	3.44	23.05	40.86	11.81	12.30	9.86	7.39
<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	5.85	35.62	68.53	15.03	15.99	12.20	8.03
<u>Domestic Equity</u>	\$ 9,995,248,332.67	7.73	37.04	70.79	17.15	17.01	14.00	8.89
<i>S&P 1500 Index</i>		6.91	31.43	58.73	16.47	16.15	13.74	8.49
<u>All-Cap Equities</u>	\$ 519,600,958.58	10.12	41.23	70.79	19.38	-	-	-
<i>Russell 3000 Index</i>		6.35	33.19	62.53	17.12	16.64	13.79	-
Fort Washington Focused Equity	\$ 519,600,958.58	10.12	41.23	70.79	19.38	-	-	-
<u>Large-Cap Equities</u>	\$ 8,080,654,912.56	7.20	35.26	68.89	17.37	17.09	14.11	-
<i>S&P 500 Index</i>		6.17	29.71	56.35	16.78	16.29	13.91	-
Todd Asset Large Cap Intrinsic Value	\$ 1,271,201,161.11	13.06	42.85	77.32	12.12	15.25	12.38	8.57
S&P 500 Stock Index	\$ 2,572,945,232.78	6.28	30.25	57.12	17.26	16.72	14.18	8.71
UBS Value Oriented (Global)	\$ 958,405,180.12	8.57	38.98	79.00	16.55	17.03	13.60	9.46
State Street US Premier Growth Equity	\$ 953,599,188.94	3.65	27.35	61.26	23.26	21.12	16.89	-
Todd Asset Intrinsic Value Opportunity (Alpha)	\$ 591,700,751.07	15.32	41.56	76.03	12.39	9.91	10.53	-
UBS Alpha Equity	\$ 398,596,124.85	10.08	39.97	79.52	18.94	18.60	14.63	-
Wellington Large Cap Equity	\$ 763,365,789.71	4.28	30.77	58.20	18.49	17.88	15.18	-
Baillie Gifford US Equity Growth	\$ 570,841,483.98	-1.48	54.37	141.77	-	-	-	-
<u>Mid-Cap Equities</u>	\$ 849,152,143.58	8.66	42.75	78.17	15.25	16.48	13.23	-
<i>S&P 400 Index</i>		13.47	47.86	83.46	13.40	14.37	11.92	-
S&P 400 Stock Index	\$ 337,742,101.39	13.82	47.86	83.19	13.36	14.44	11.98	-
Wellington Mid Cap Equity	\$ 511,410,042.19	5.40	39.53	75.05	17.03	18.56	14.56	-
<u>Small-Cap Equities</u>	\$ 545,840,317.95	12.41	54.00	90.17	14.16	15.88	13.27	-
<i>S&P 600 Index</i>		18.24	60.18	95.33	13.71	15.60	12.97	-
Wellington Small Cap Equity	\$ 253,802,785.06	6.64	47.55	84.30	14.70	16.41	13.76	-
S&P 600 Stock Index	\$ 292,037,532.89	18.32	60.49	95.97	13.74	15.48	12.93	-
<u>International Equity</u>	\$ 5,204,710,894.31	2.33	32.86	64.10	11.23	14.09	7.88	-
<i>MSCI AC World Ex US</i>		3.60	29.01	50.03	7.02	10.28	5.41	-
Todd Asset International Intrinsic Value	\$ 929,317,399.07	9.38	38.10	65.17	8.24	10.14	6.37	-
Baillie Gifford EAFE	\$ 1,673,405,961.85	-2.46	35.09	84.94	19.91	22.86	12.44	-
UBS All Country World Ex US Equity	\$ 1,128,034,067.49	2.24	33.18	56.22	7.80	12.16	-	-
Barings All Country World Ex US	\$ 763,957,633.00	3.92	24.00	44.93	8.06	11.27	-	-
Black Rock MSCI ACWI Ex US IMI Index	\$ 609,431,784.22	3.85	30.29	53.34	7.17	10.36	-	-
Todd Asset International Intrinsic Value Opportunity	\$ 100,564,048.68	5.62	29.43	53.71	2.98	6.58	-	-

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Fixed Income	\$ 3,862,680,341.52	-4.49	-2.83	1.19	5.21	3.71	4.21	5.21
<i>Bloomberg Barclays Govt/Credit Index</i>		-4.28	-2.75	0.86	4.99	3.36	3.70	4.62
Intermediate								
<i>Bloomberg Barclays Intermediate Govt/Credit Index</i>		-1.86	-0.78	2.01	4.36	2.75	2.88	4.03
Intermediate Bond	\$ 563,555,588.58	-2.27	-1.19	2.36	4.03	2.60	2.95	4.36
Broad								
<i>Bloomberg Barclays Govt/Credit Index</i>		-4.28	-2.75	0.86	4.99	3.36	3.70	4.62
Fort Washington Core Fixed Income	\$ 774,454,551.54	-4.59	-1.62	4.75	5.77	4.27	4.29	5.18
Internal Bond	\$ 180,387,755.93	-2.95	-0.37	0.83	5.25	4.00	4.72	5.15
Broad Market Bond	\$ 783,039,547.45	-4.37	-3.79	-1.22	4.72	3.44	4.13	5.19
403(b) Tax-Sheltered Trust	\$ 307,476.33	0.01	0.03	0.06	1.29	1.05	0.57	1.50
Galliard Capital Management Core Fixed Income	\$ 760,825,347.63	-4.07	-1.92	3.32	5.43	3.91	4.52	-
Long								
<i>Hybrid Index</i>		-6.44	-4.50	-0.12	5.77	4.13	4.88	5.43
Long Term Bond	\$ 800,110,074.06	-6.94	-5.33	-1.58	6.02	4.38	5.25	6.09
Real Estate	\$ 1,353,236,373.94	1.95	4.13	4.13	6.58	8.33	8.67	9.02
In House Real Estate Equity	\$ 403,430,071.63	1.07	2.47	4.13	5.02	7.83	7.95	8.38
<i>CPI plus 2%</i>		1.74	4.46	4.69	4.04	4.19	3.76	4.06
Core Real Estate	\$ 584,795,353.35	1.68	2.06	3.46	6.47	7.07	10.50	-
<i>NCREIF ODCE (VW) Index</i>		2.09	3.92	2.30	4.88	6.19	9.67	-
Prudential PRISA	\$ 381,624,961.09	1.47	0.86	2.54	5.85	6.75	10.33	-
Carlyle Property Investors	\$ 66,533,900.90	2.78	9.05	8.26	8.74	-	-	-
TA Realty Core Property	\$ 136,636,491.36	1.73	2.47	4.22	8.54	-	-	-
Non-Core Real Estate	\$ 365,010,948.96	3.42	9.28	4.88	8.74	10.53	-	-
<i>NCREIF Property Index</i>		1.72	3.64	2.61	4.89	5.81	-	-
Carlyle Realty Partners VI	\$ 3,765,581.00	1.74	-5.24	-18.40	-9.59	-3.47	-	-
Blackstone Partners VII	\$ 19,263,316.11	0.42	-7.35	-18.89	-1.75	3.85	-	-
Rockwood Capital Real Estate Partners IX	\$ 9,560,024.68	2.65	3.84	-26.09	-6.78	3.11	-	-
The Realty Associates X	\$ 5,254,905.00	0.68	-1.40	-7.06	10.91	12.59	-	-
Angelo Gordon Net Lease Realty III	\$ 46,667,250.00	3.21	7.59	10.92	9.43	9.65	-	-
Carlyle Realty Partners VII	\$ 17,946,289.00	1.86	4.49	0.31	10.99	12.61	-	-
Landmark Real Estate Partners VII	\$ 14,053,207.65	0.98	-2.92	-4.72	0.01	4.35	-	-
Blackstone Partners VIII	\$ 38,464,074.81	5.26	17.37	9.88	13.75	17.28	-	-
The Realty Associates XI	\$ 49,187,303.00	6.59	13.72	12.90	13.21	-	-	-
Rockwood Capital Real Estate Partners X	\$ 36,928,666.02	2.48	18.82	5.96	8.23	-	-	-
Landmark Real Estate Partners VIII	\$ 17,395,990.13	1.36	-1.06	3.70	5.32	-	-	-
Carlyle Realty Partners VIII	\$ 18,209,565.00	3.57	14.57	19.29	-166.14	-	-	-
Blackstone Partners IX	\$ 19,294,614.73	7.95	27.49	23.55	-	-	-	-
Angelo Gordon Net Lease Realty IV	\$ 13,744,924.00	0.38	2.79	15.20	-	-	-	-
Rockwood Capital Real Estate Partners XI	\$ 30,287,926.83	0.61	91.34	289.27	-	-	-	-
The Realty Associates XII	\$ 24,987,311.00	5.05	16.98	15.68	-	-	-	-

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Alternative Investments								
<u>Private Equity</u>	\$ 1,356,384,068.92	7.12	23.82	14.54	12.69	13.56	12.90	-
<u>Mature Private Equity</u>	\$ 665,046,468.69	6.88	21.87	11.31	10.19	10.18	-	-
<i>S&P 500 Index plus 3%</i>		6.96	32.61	61.04	20.28	19.78	-	-
KKR 2006	\$ 6,077,402.00	16.81	34.75	9.05	24.38	17.98	15.96	-
KKR European III	\$ 2,943,682.00	4.00	53.77	2.75	5.71	10.59	11.49	-
Riverstone/Carlyle E&P IV	\$ 2,234,651.00	14.98	63.81	-24.46	-17.03	-9.17	-5.37	-
Alinda Infrastructure II	\$ 13,813,624.00	0.30	5.21	-6.71	-5.41	-4.72	2.09	-
Capital South Partners III	\$ 789,475.64	0.00	4.12	-2.76	2.07	4.34	12.18	-
Landmark Equity Partners XIV	\$ 4,341,260.00	9.02	0.77	5.01	2.93	2.32	10.82	-
Lexington Capital Partners VII	\$ 5,644,190.00	9.36	6.45	10.97	10.01	9.15	12.83	-
Stepstone Pioneer Capital III	\$ 10,641,173.00	0.00	15.64	5.26	9.58	7.62	14.27	-
Oaktree Mezzanine III	\$ 409,541.00	-9.71	-14.74	-18.74	16.95	15.37	12.90	-
JP Morgan Maritime	\$ 22,748,866.65	4.56	-6.56	-17.47	-6.11	-8.97	-131.59	-
Audax Mezzanine III	\$ 2,963,444.23	0.00	-4.24	-1.40	11.03	12.63	13.00	-
Hellman & Friedman VII	\$ 22,910,688.92	8.06	58.10	33.99	30.03	35.05	-	-
Oaktree European Principal III	\$ 17,417,835.00	5.22	14.07	1.82	4.75	9.91	-	-
NGP Natural Resources X	\$ 6,606,810.00	-8.42	-12.75	-36.22	-25.71	-8.63	-	-
Riverstone E&P V	\$ 7,986,849.00	-3.36	-1.64	-45.34	-31.62	-16.30	-	-
APAX VIII	\$ 17,314,438.25	2.47	71.96	50.33	29.60	22.73	-	-
Actis Global IV	\$ 33,399,866.00	6.08	36.53	14.53	14.84	10.57	-	-
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	11.48	3.09	11.83	10.58	13.33	-	-
Fort Washington VIII	\$ 28,035,077.00	10.12	6.33	13.35	12.71	13.18	-	-
Carlyle Global Financial Service Partners II	\$ 12,250,855.00	28.77	61.76	53.25	29.24	25.17	-	-
Public Pension Capital LLC	\$ 83,349,400.26	0.00	15.61	23.77	32.05	27.16	-	-
NGP Natural Resources XI	\$ 32,854,212.00	3.10	3.61	-20.74	-8.77	4.78	-	-
Gavea Investments V	\$ 6,867,198.48	15.67	107.80	70.24	61.29	51.62	-	-
Oaktree Mezzanine IV	\$ 18,307,104.00	2.88	7.66	9.98	10.14	9.82	-	-
Lexington Capital Partners VIII	\$ 22,782,051.00	10.34	13.39	17.79	15.67	16.58	-	-
KKR European IV	\$ 49,500,236.00	10.04	35.14	20.04	23.65	19.88	-	-
IFM Global Infrastructure	\$ 184,805,034.97	4.38	11.87	7.75	12.01	13.70	-	-
Carlyle Europe Partners IV	\$ 33,894,137.00	27.39	44.48	28.93	13.26	13.60	-	-

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Private Equity < 5 Years	\$ 691,337,600.23	8.54	29.30	21.33	15.58	17.03	-	-
Audax Private Equity V	\$ 22,347,751.29	0.00	18.40	12.58	14.11	-	-	-
Fort Washington IX	\$ 26,677,386.00	4.90	7.11	14.26	10.59	-	-	-
Fort Washington IX-K	\$ 25,474,591.00	6.50	11.09	18.81	9.13	-	-	-
Hellman & Friedman VIII	\$ 68,934,310.00	7.16	58.27	36.05	16.61	-	-	-
Riverstone E&P VI	\$ 31,111,411.00	8.28	18.73	-26.22	-24.05	-	-	-
Audax Mezzanine IV	\$ 13,370,765.73	0.00	6.76	13.21	11.02	-	-	-
JP Morgan Maritime II	\$ 6,879,290.44	0.67	0.71	-8.01	1.34	-	-	-
APAX IX	\$ 75,001,851.04	20.67	57.76	38.61	32.81	-	-	-
Oaktree European Principal IV	\$ 46,298,125.00	10.66	23.30	17.39	9.69	-	-	-
KKR Americas XII	\$ 43,595,477.00	9.48	47.34	41.90	24.43	-	-	-
NGP Natural Resources XII	\$ 26,788,863.00	7.29	21.46	-1.70	3.31	-	-	-
Carlyle Global Financial Service Partners III	\$ 48,411,954.00	4.15	2.86	-1.35	-	-	-	-
JP Morgan Global Transport Income	\$ 67,186,994.96	1.84	5.37	11.92	-	-	-	-
APAX Digital	\$ 33,580,235.35	13.48	84.87	67.41	-	-	-	-
Landmark Equity Partners XVI	\$ 23,219,785.42	5.46	11.55	25.52	-	-	-	-
Carlyle Asia V	\$ 20,716,611.00	7.63	52.12	19.50	-	-	-	-
Carlyle Europe V	\$ 14,457,258.00	5.48	7.45	-11.15	-	-	-	-
Fort Washington X	\$ 7,462,892.00	7.61	6.49	17.66	-	-	-	-
Audax PE VI-A	\$ 11,091,629.00	0.00	40.00	44.79	-	-	-	-
Fort Washington X-S	\$ 3,524,181.00	5.98	1.24	12.78	-	-	-	-
Oaktree Mezzanine V	\$ 11,547,320.00	2.33	9.11	12.27	-	-	-	-
Lexington Capital Partners IX	\$ 19,182,136.00	10.67	8.96	14.16	-	-	-	-
Oaktree European V	\$ 15,497,685.00	24.90	30.14	25.53	-	-	-	-
KKR European V	\$ 22,372,652.00	4.49	43.68	8.52	-	-	-	-
APAX X	\$ 6,606,445.00	214.74	-	-	-	-	-	-
Timberland	\$ 208,744,972.38	-11.41	-6.30	-5.32	0.89	0.48	2.75	-
<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>	<i>4.55</i>	-
Hancock Bluegrass LLC - Oregon	\$ 3,488,451.00	0.00	10.86	10.44	5.70	7.49	9.07	-
Molpus Lake Superior Timberlands (Michigan)	\$ 75,328,298.62	-18.81	-15.15	-14.94	-3.84	-3.57	0.45	-
Molpus Lake Superior Timberlands (Hiwassee)	\$ 8,563,036.45	-15.99	-13.39	-12.75	3.87	0.75	1.37	-
Molpus Seven States	\$ 51,121,009.52	-3.98	-1.86	-0.44	4.00	2.50	3.83	-
Molpus Lake Superior Timberlands (Magnolia)	\$ 70,244,176.79	-7.40	1.00	3.41	-	-	-	-

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Additional Categories	\$ 1,795,401,629.21	2.55	12.53	15.28	5.88	6.83	5.81	-
<i>B of A Merrill Lynch U.S. High Yield Master II Index</i>		<i>0.90</i>	<i>12.50</i>	<i>23.31</i>	<i>6.53</i>	<i>7.94</i>	<i>6.31</i>	-
Evergreen Funds								
Fort Washington High Yield Bond	\$ 324,835,699.11	0.15	10.87	20.96	6.16	7.11	5.90	-
Marathon TRS Credit	\$ 397,090,544.60	5.57	16.04	4.04	2.50	6.27	-	-
Shenkman Capital Management	\$ 292,240,998.96	1.28	8.91	19.64	4.85	5.55	-	-
Barings Capital European Loan	\$ 99,670,000.00	4.39	14.72	28.87	6.54	6.89	-	-
Columbia High Yield Bond	\$ 204,343,091.25	0.51	11.29	21.24	7.36	7.14	-	-
Lord Abbett High Yield Bond	\$ 106,475,351.39	1.25	15.59	25.95	-	-	-	-
In House High Yield Bond	\$ 134,178,425.48	-0.47	7.33	14.43	-	-	-	-
Non-Evergreen Funds								
Avenue Special Situations VI	\$ 12,354,952.00	63.76	61.58	55.36	20.34	6.35	4.41	-
Oaktree Opportunities IX	\$ 34,006,821.00	7.59	25.70	-1.70	5.59	7.95	-	-
Highbridge Specialty Loan III	\$ 1,921,318.11	-9.61	-11.80	-13.73	-1.83	1.98	-	-
Oaktree European Dislocation	\$ 1,540,749.00	-14.97	-14.11	-18.54	-17.31	-4.24	-	-
Marathon European Credit Opportunities II	\$ 15,255,393.78	0.47	-3.80	-2.84	6.00	9.24	-	-
Oaktree Opportunities X	\$ 22,407,665.00	5.19	12.21	3.78	5.92	19.36	-	-
Oaktree European Capital Solutions	\$ 28,548,352.00	8.51	23.46	23.62	14.39	14.18	-	-
Marathon European Credit Opportunities III	\$ 87,019,108.53	1.36	6.16	7.27	10.98	11.09	-	-
Oaktree Opportunities X(b)	\$ 33,513,159.00	6.38	35.17	12.86	-	-	-	-
Short Term								
Cash (Unallocated)	\$ 755,999,703.89	0.01	0.03	0.06	1.36	1.13	0.62	1.54
<i>90 Day T-Bill</i>		<i>0.02</i>	<i>0.09</i>	<i>0.12</i>	<i>1.49</i>	<i>1.18</i>	<i>0.62</i>	<i>1.36</i>

Total Trust Gross Return for 30-year period*

8.45

*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.