

Investment Performance Review  
Period Ending April 30, 2021

# **Employees' Retirement System of the City of Norfolk**

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Equities	Index Returns (%)					
	Month	3 M	YTD	1 Year	3 Yr Ann	5 Yr Ann
S&P 500 Total Return	5.34	12.98	11.84	45.98	18.67	17.42
Russell Midcap Index	5.10	13.95	13.65	59.57	16.71	15.58
Russell 2000 Index	2.10	9.55	15.07	74.91	15.23	16.48
Russell 1000 Growth Index	6.80	8.61	7.81	51.41	25.37	22.88
Russell 1000 Value Index	4.00	16.77	15.70	45.92	12.30	12.15
Russell 3000 Index	5.15	12.33	11.83	50.92	18.95	17.67
MSCI EAFE NR	3.01	7.74	6.59	39.88	6.27	8.87
MSCI EM NR	2.49	1.71	4.83	48.71	7.51	12.50

Russell Indices Style Returns *						
	V B G			V B G		
L	15.7	11.6	7.8	2.8	20.9	38.4
M	18.5	13.6	5.0	4.9	17.0	35.5
S	23.6	15.1	7.2	4.6	19.9	34.5

YTD

2020

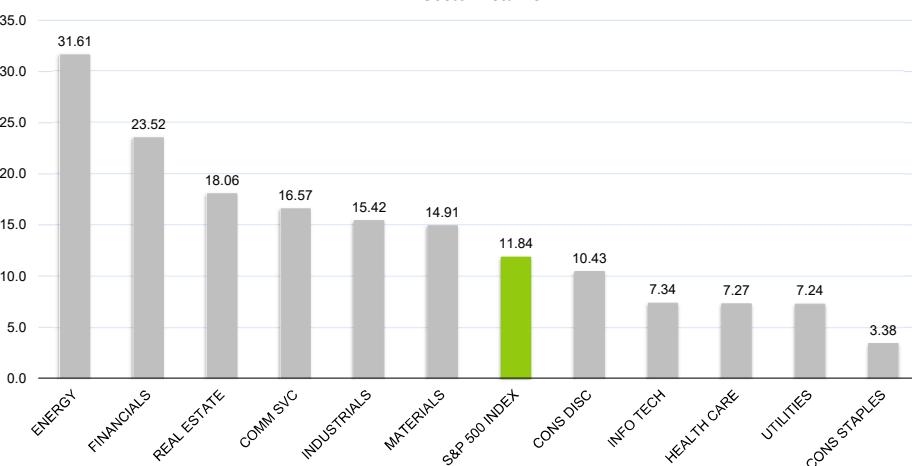
Fixed Income	Index Returns (%)					
	Month	3 M	YTD	1 Year	Mod. Adj. Duration	Yield to Worst
U.S. Aggregate	0.79	(1.91)	(2.61)	(0.27)	6.39	1.51
U.S. Corporate Investment Grade	1.11	(2.34)	(3.59)	4.46	8.54	2.18
U.S. Corporate High Yield	1.09	1.61	1.95	19.67	3.85	3.99
Global Aggregate	1.26	(2.39)	(3.25)	3.95	7.40	1.13

Currencies	Levels		
	04/30/21	12/31/20	12/31/19
Euro Spot	1.20	1.22	1.12
British Pound Spot	1.38	1.37	1.33
Japanese Yen Spot	109.31	103.25	108.61
Swiss Franc Spot	0.91	0.89	0.97

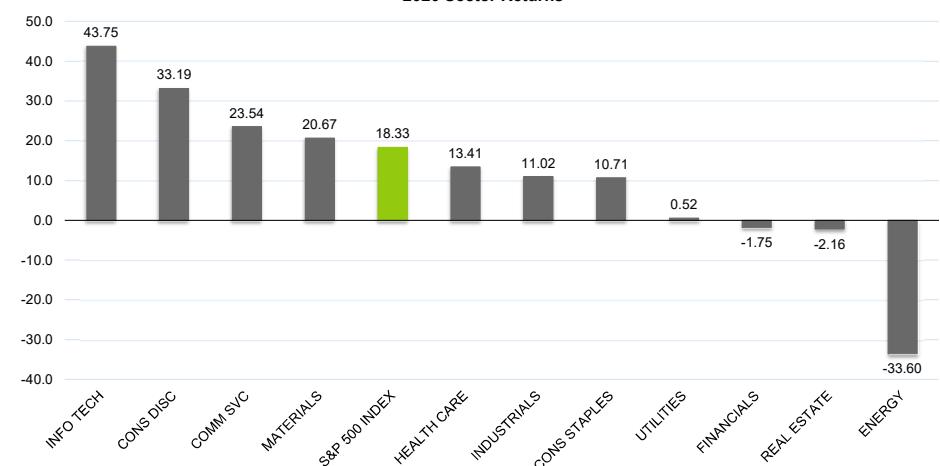
Key Rates	Levels (%)				
	04/30/21	12/31/20	12/31/19	12/31/18	12/31/17
US Generic Govt 3 Mth	0.00	0.06	1.54	2.35	1.38
US Generic Govt 2 Yr	0.16	0.12	1.57	2.49	1.88
US Generic Govt 10 Yr	1.63	0.91	1.92	2.68	2.41
US Generic Govt 30 Yr	2.30	1.64	2.39	3.01	2.74
ICE LIBOR USD 3M	0.18	0.24	1.91	2.81	1.69
Euribor 3 Month ACT/360	(0.54)	(0.55)	(0.38)	(0.31)	(0.33)
Bankrate 30Y Mortgage Rates Na	3.11	2.87	3.86	4.51	3.85
Prime	3.25	3.25	4.75	5.50	4.50

Commodities	Levels		
	04/30/21	12/31/20	12/31/19
Oil	63.58	48.63	54.44
Gasoline	2.90	2.25	2.59
Natural Gas	2.93	2.61	2.29
Gold	1,767.70	1,902.80	1,187.30
Silver	25.87	26.53	16.50
Copper	446.80	352.65	283.85
Corn	673.25	480.25	418.50
BBG Commodity TR Idx	192.93	166.63	172.00

## YTD Sector Returns



## 2020 Sector Returns



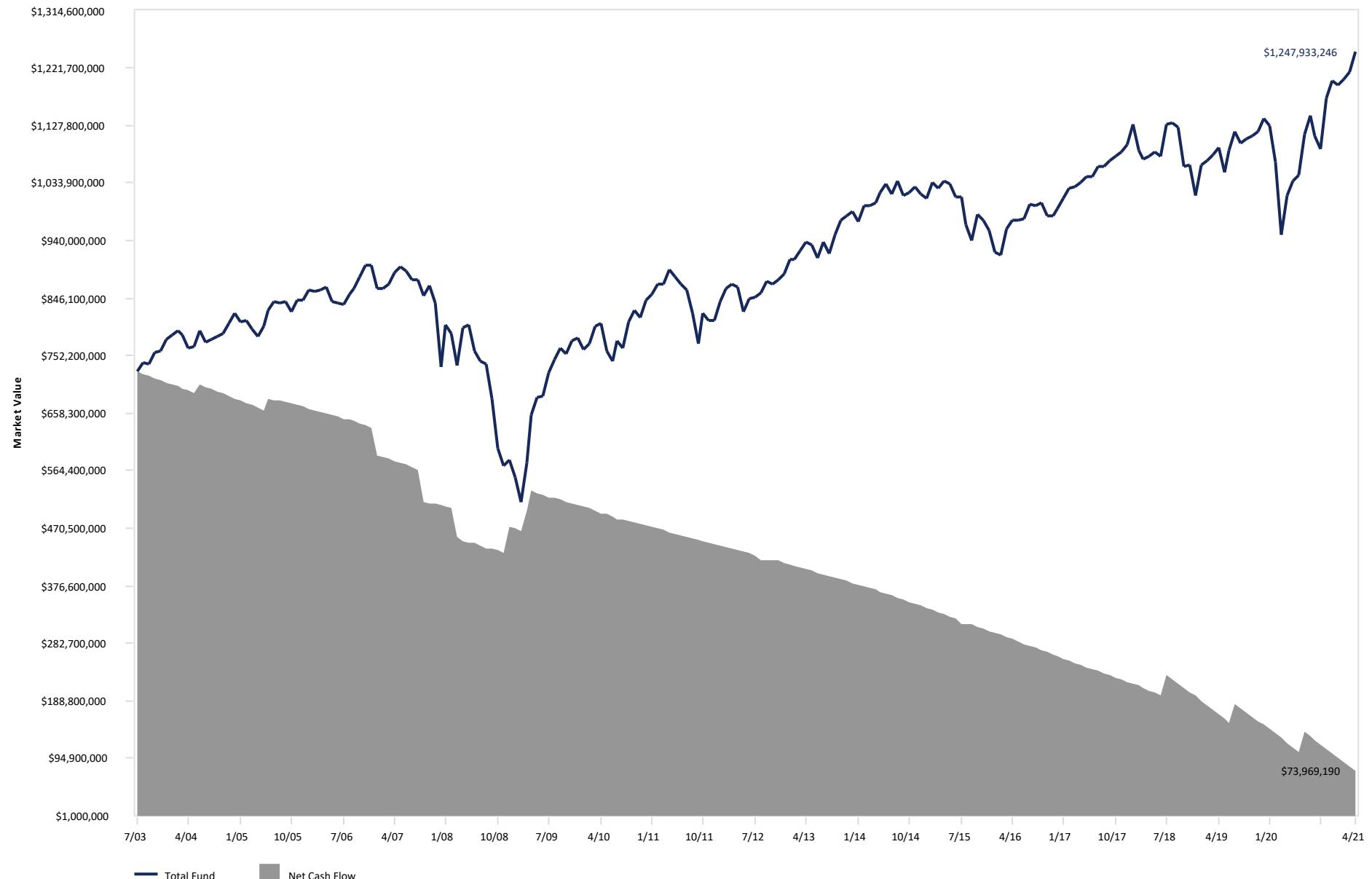
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\*Heat maps are displayed utilizing a 9-color scale, with green as the highest return for the time period noted and red as the lowest return for the time period noted. Color scales within each time period are mutually exclusive.

# Employees' Retirement System of the City of Norfolk

## Schedule of Investable Assets

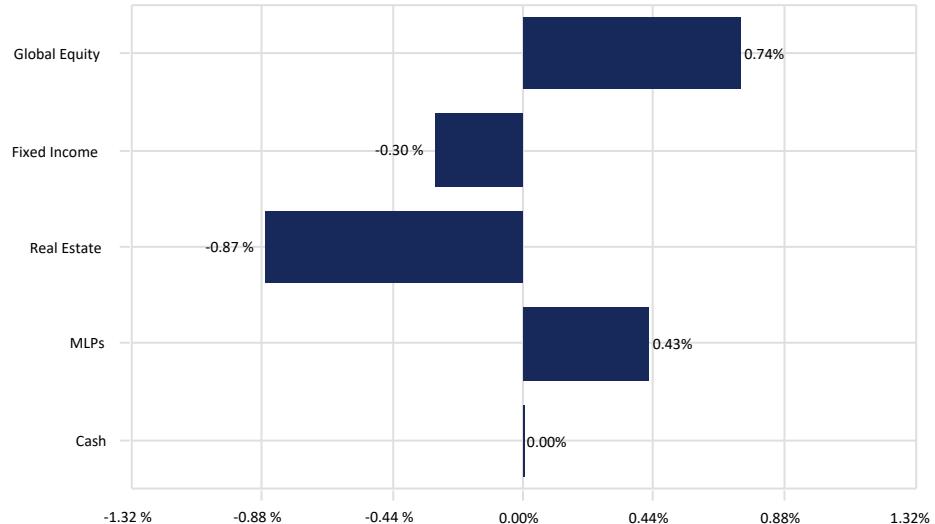
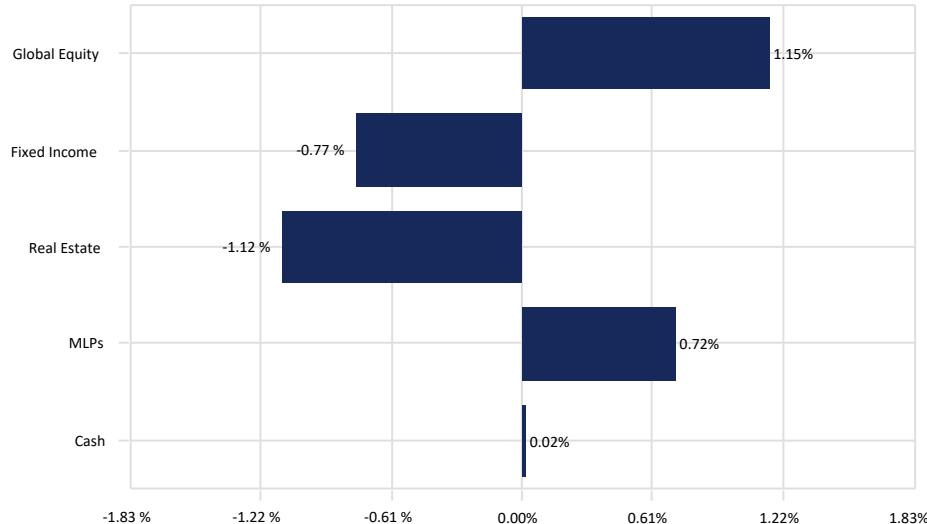
April 30, 2021



# Employees' Retirement System of the City of Norfolk

Asset Allocation vs. Target Allocation

April 30, 2021



April 30, 2021

	Market Value (\$)	Allocation (%)	Target (%)
Global Equity	700,768,531	56.15	55.00
Fixed Income	364,712,946	29.23	30.00
Real Estate	79,599,441	6.38	7.50
MLPs	102,563,592	8.22	7.50
Cash	288,736	0.02	0.00
Total Fund	1,247,933,246	100.00	100.00

March 31, 2021

	Market Value (\$)	Allocation (%)	Target (%)
Global Equity	677,860,831	55.74	55.00
Fixed Income	361,232,346	29.70	30.00
Real Estate	80,667,934	6.63	7.50
MLPs	96,398,205	7.93	7.50
Cash	19,067	0.00	0.00
Total Fund	1,216,178,383	100.00	100.00



# Employees' Retirement System of the City of Norfolk

Asset Allocation & Performance - (net of fees)

April 30, 2021

	Asset \$	Asset %	1 Month	3 Month	CYTD	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year	Since Inception	Inception Date
<b>Total Fund Composite</b>	<b>1,247,933,246</b>	<b>100.00</b>	<b>3.25</b>	<b>6.47</b>	<b>6.53</b>	<b>22.32</b>	<b>27.89</b>	<b>9.25</b>	<b>9.36</b>	<b>7.39</b>	<b>7.48</b>	<b>8.28</b>	<b>Oct -1990</b>
Total Fund Policy (62.5% ACWI/37.5% Agg)			3.01	5.36	4.96	21.60	28.11	10.55	10.02	7.87	7.68	8.46	
Excess Return			0.24	1.11	1.57	0.72	-0.22	-1.30	-0.66	-0.48	-0.20	-0.18	
<b>Total Fund Strategy Index</b>			<b>3.16</b>	<b>6.62</b>	<b>6.75</b>	<b>22.75</b>	<b>28.41</b>	<b>9.78</b>	<b>9.35</b>	<b>7.33</b>	<b>7.43</b>	<b>8.38</b>	
Excess Return			0.09	-0.15	-0.22	-0.43	-0.52	-0.53	0.01	0.06	0.05	-0.10	
<b>Composite Returns</b>													
Global Equity	700,768,531	56.15	4.39	10.33	10.19	38.13	49.23	13.74	14.36	10.70	10.32	9.64	Oct -1990
<i>Global Equity Policy</i>			4.34	9.89	9.70	37.21	48.11	13.15	13.82	10.23	9.94	9.87	
Excess Return			0.05	0.44	0.49	0.92	1.12	0.59	0.54	0.47	0.38	-0.23	
Fixed Income	364,712,946	29.23	0.96	-1.94	-2.41	-0.74	0.65	5.30	3.54	3.55	3.47	5.90	Oct -1990
<i>Bloomberg Barc. U.S. Aggregate</i>			0.79	-1.91	-2.61	-1.35	-0.27	5.19	3.19	3.30	3.39	5.83	
Excess Return			0.17	-0.03	0.20	0.61	0.92	0.11	0.35	0.25	0.08	0.07	
Real Estate	79,599,441	6.38	0.15	1.36	1.50	1.20	-1.29	1.43	3.38	5.56	7.32	7.44	Apr -2011
<i>NCREF Fund Index-ODCE (VW) (Net)</i>			0.00	1.91	1.91	3.31	1.50	3.97	5.26	7.29	8.68	8.60	
Excess Return			0.15	-0.55	-0.41	-2.11	-2.79	-2.54	-1.88	-1.73	-1.36	-1.16	
MLPs	102,563,592	8.22	6.40	17.60	24.28	35.48	34.87	-3.67	-1.34	-4.63	-	-0.68	Mar -2013
<i>Alerian MLP Index</i>			7.15	23.45	30.67	44.93	45.47	-3.27	-2.00	-6.18	-	-3.26	
Excess Return			-0.75	-5.85	-6.39	-9.45	-10.60	-0.40	0.66	1.55	-	2.58	
Cash	288,736	0.02											



# Employees' Retirement System of the City of Norfolk

## Asset Allocation & Performance - (net of fees)

April 30, 2021

	Asset \$	Asset %	1 Month	3 Month	CYTD	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year	Since Inception	Inception Date
<b>Global Equity</b>													
SSgA MSCI ACWI IMI Index Fund	700,768,531	56.15	4.39	10.07	9.93	37.80	48.88	13.65	14.30	-	-	14.30	May -2016
<i>MSCI AC World IMI (Net)</i>			4.34	9.89	9.70	37.21	48.11	13.15	13.82	-	-	13.82	
Excess Return			0.05	0.18	0.23	0.59	0.77	0.50	0.48	-	-	0.48	
<b>Fixed Income</b>													
PIMCO Total Return	194,408,589	15.58	1.11	-1.98	-2.26	-0.27	1.35	5.39	3.85	3.77	3.64	6.23	Jan -1991
<i>Blmbg. Barc. U.S. Aggregate</i>			0.79	-1.91	-2.61	-1.35	-0.27	5.19	3.19	3.30	3.39	5.71	
Excess Return			0.32	-0.07	0.35	1.08	1.62	0.20	0.66	0.47	0.25	0.52	
SSgA Bond Market Index	170,304,356	13.65	0.79	-1.89	-2.59	-1.29	-0.16	5.22	3.21	3.32	3.40	3.91	Jan -2009
<i>Blmbg. Barc. U.S. Aggregate</i>			0.79	-1.91	-2.61	-1.35	-0.27	5.19	3.19	3.30	3.39	3.90	
Excess Return			0.00	0.02	0.02	0.06	0.11	0.03	0.02	0.02	0.01	0.01	
<b>Real Estate</b>													
JP Morgan Asset Mgmt Strategic Property Fund	44,297,176	3.55	0.27	1.62	1.88	3.58	1.19	3.58	4.92	6.76	8.57	8.69	Apr -2011
<i>NCREIF Fund Index-ODCE (VW) (Net)</i>			0.00	1.91	1.91	3.31	1.50	3.97	5.26	7.29	8.68	8.60	
Excess Return			0.27	-0.29	-0.03	0.27	-0.31	-0.39	-0.34	-0.53	-0.11	0.09	
UBS Trumbull Property Fund	35,302,265	2.83	0.00	1.05	1.05	-1.48	-4.08	-0.87	1.67	4.19	-	5.30	Jan -2012
<i>NCREIF Fund Index-ODCE (VW) (Net)</i>			0.00	1.91	1.91	3.31	1.50	3.97	5.26	7.29	-	8.13	
Excess Return			0.00	-0.86	-0.86	-4.79	-5.58	-4.84	-3.59	-3.10	-	-2.83	
<b>MLPs</b>													
Harvest MLP	52,880,808	4.24	6.13	18.72	25.57	39.17	40.03	-1.86	-0.21	-3.85	-	-0.16	Mar -2013
<i>Alerian MLP Index</i>			7.15	23.45	30.67	44.93	45.47	-3.27	-2.00	-6.18	-	-3.26	
Excess Return			-1.02	-4.73	-5.10	-5.76	-5.44	1.41	1.79	2.33	-	3.10	
Tortoise Capital Advisors	49,682,783	3.98	6.68	17.38	23.94	32.74	30.67	-5.22	-2.34	-5.33	-	-1.75	Apr -2013
<i>Alerian MLP Index</i>			7.15	23.45	30.67	44.93	45.47	-3.27	-2.00	-6.18	-	-3.92	
Excess Return			-0.47	-6.07	-6.73	-12.19	-14.80	-1.95	-0.34	0.85	-	2.17	



# Employees' Retirement System of the City of Norfolk

## Financial Reconciliation

1 Month Ending April 30, 2021

	Market Value As of 04/01/2021	Net Transfers	Contributions	Distributions	Mgmt Fees	Income	Apprec./ Deprec.	Market Value As of 04/30/2021
Total Fund Composite	1,216,178,383	-	-	-7,641,000	-108,697	485,793	39,018,767	1,247,933,246
<b>Global Equity</b>	<b>677,860,831</b>	<b>-6,700,000</b>	-	-	-	-	-	<b>29,607,700</b> <b>700,768,531</b>
SSgA MSCI ACWI IMI Index	677,860,831	-6,700,000	-	-	-	-	-29,607,700	700,768,531
<b>Fixed Income</b>	<b>361,232,346</b>	-	-	-	-	-635,003	4,115,602	<b>364,712,946</b>
PIMCO Total Return	192,267,523	-	-	-	-	-635,003	2,776,068	194,408,589
SSgA Bond Market Index	168,964,823	-	-	-	-	-	1,339,533	170,304,356
<b>Real Estate</b>	<b>80,667,934</b>	<b>-1,188,312</b>	-	-	-108,697	393,959	-165,442	<b>79,599,441</b>
JP Morgan Strategic Property	44,177,361	-4	-	-	-108,697	133,771	94,745	44,297,176
UBS Trumbull Property	36,490,573	-1,188,308	-	-	-	260,188	-260,188	35,302,265
<b>MLPs</b>	<b>96,398,205</b>	-	-	-	-	<b>704,739</b>	<b>5,460,648</b>	<b>102,563,592</b>
Harvest MLP	49,825,514	-	-	-	-	299,766	2,755,528	52,880,808
Tortoise Capital Advisors	46,572,691	-	-	-	-	404,973	2,705,120	49,682,783
Cash	19,067	7,888,312	-	-7,641,000	-	22,097	260	288,736

# Employees' Retirement System of the City of Norfolk

## Financial Reconciliation

July 1, 2020 To April 30, 2021

	Market Value As of 07/01/2020	Net Transfers	Contributions	Distributions	Mgmt Fees	Income	Apprec./ Deprec.	Market Value As of 04/30/2021
Total Fund Composite	1,045,856,048	-	41,139,784	-73,314,000	-1,313,075	222,014,797	13,659,366	1,247,933,246
<b>Global Equity</b>	<b>586,648,165</b>	<b>-100,020,000</b>	-	-	<b>-198,225</b>	-	<b>214,338,591</b>	<b>700,768,531</b>
SSgA MSCI ACWI IMI Index	586,648,165	-100,020,000	-	-	-198,225	-	214,338,591	700,768,531
<b>Fixed Income</b>	<b>326,129,608</b>	<b>40,848,246</b>	<b>250,446</b>	-	<b>-274,469</b>	<b>216,784,668</b>	<b>-219,025,553</b>	<b>364,712,946</b>
PIMCO Total Return	167,396,914	27,148,246	250,446	-	-250,446	216,784,668	-216,921,238	194,408,589
SSgA Bond Market Index	158,732,694	13,700,000	-	-	-24,023	-	-2,104,315	170,304,356
<b>Real Estate</b>	<b>81,444,905</b>	<b>-2,691,806</b>	-	-	<b>-649,289</b>	<b>1,307,397</b>	<b>297,908</b>	<b>79,599,441</b>
JP Morgan Strategic Property	42,876,784	-28	-	-	-322,777	486,799	1,366,072	44,297,176
UBS Trumbull Property	38,568,122	-2,691,778	-	-	-326,512	820,597	-1,068,164	35,302,265
<b>MLPs</b>	<b>51,617,231</b>	<b>29,000,000</b>	<b>191,091</b>	-	<b>-191,091</b>	<b>3,898,773</b>	<b>18,047,588</b>	<b>102,563,592</b>
Harvest MLP	26,472,375	14,500,000	48,460	-	-48,460	1,676,349	10,232,085	52,880,808
Tortoise Capital Advisors	25,144,856	14,500,000	142,631	-	-142,631	2,222,424	7,815,503	49,682,783
Cash	16,139	32,863,560	40,698,246	-73,314,000	-	23,960	832	288,736



## Employees' Retirement System of the City of Norfolk

Historical Hybrid Composition

April 30, 2021

	<u>(%)</u>		<u>(%)</u>
<b>Total Fund Policy : May-2016</b>		<b>Total Fund Strategy Index : Jul-2016</b>	
MSCI AC World IMI (Net)	62.50	MSCI AC World IMI (Net)	55.00
Bloomberg Barc. U.S. Aggregate	37.50	Bloomberg Barc. U.S. Aggregate	30.00
		NCREIF Fund Index-ODCE (VW) (Net)	7.50
		Alerian MLP Index	7.50

Strategy Index is comprised of the returns of the various broad market benchmarks assigned to each manager and weighted to reflect the System's target asset allocation.



# Employees' Retirement System of the City of Norfolk

## Historical Hybrid Composition

April 30, 2021

### Global Equity Policy

	(%)
<b>May-2016</b>	
MSCI AC World IMI (Net)	100.00
<b>Sep-2009</b>	
Russell 3000 Index	60.00
MSCI AC World ex USA (Net)	40.00
<b>Jun-2009</b>	
Russell 3000 Index	70.00
MSCI AC World ex USA (Net)	30.00
<b>Jun-2006</b>	
Russell 3000 Index	70.00
MSCI EAFE Index	30.00
<b>Oct-1990</b>	
S&P 500	100.00

<b>Active Return</b>	- Arithmetic difference between the manager's performance and the designated benchmark return over a specified time period.
<b>Alpha</b>	- A measure of the difference between a portfolio's actual performance and its expected return based on its level of risk as determined by beta. It determines the portfolio's non-systemic return, or its historical performance not explained by movements of the market.
<b>Beta</b>	- A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk.
<b>Consistency</b>	- The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. Higher consistency indicates the manager has contributed more to the product's performance.
<b>Distributed to Paid In (DPI)</b>	- The ratio of money distributed to Limited Partners by the fund, relative to contributions. It is calculated by dividing cumulative distributions by paid in capital. This multiple shows the investor how much money they got back. It is a good measure for evaluating a fund later in its life because there are more distributions to measure against.
<b>Down Market Capture</b>	- The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance
<b>Downside Risk</b>	- A measure similar to standard deviation that utilizes only the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. A higher factor is indicative of a riskier product.
<b>Excess Return</b>	- Arithmetic difference between the manager's performance and the risk-free return over a specified time period.
<b>Excess Risk</b>	- A measure of the standard deviation of a portfolio's performance relative to the risk free return.
<b>Information Ratio</b>	- This calculates the value-added contribution of the manager and is derived by dividing the active rate of return of the portfolio by the tracking error. The higher the Information Ratio, the more the manager has added value to the portfolio.
<b>Public Market Equivalent (PME)</b>	- Designs a set of analyses used in the Private Equity Industry to evaluate the performance of a Private Equity Fund against a public benchmark or index.
<b>R-Squared</b>	- The percentage of a portfolio's performance that can be explained by the behavior of the appropriate benchmark. A high R-Squared means the portfolio's performance has historically moved in the same direction as the appropriate benchmark.
<b>Return</b>	- Compounded rate of return for the period.
<b>Sharpe Ratio</b>	- Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is an absolute rate of return per unit of risk. A higher value demonstrates better historical risk-adjusted performance.
<b>Standard Deviation</b>	- A statistical measure of the range of a portfolio's performance. It represents the variability of returns around the average return over a specified time period.
<b>Total Value to Paid In (TVPI)</b>	- The ratio of the current value of remaining investments within a fund, plus the total value of all distributions to date, relative to the total amount of capital paid into the fund to date. It is a good measure of performance before the end of a fund's life
<b>Tracking Error</b>	- This is a measure of the standard deviation of a portfolio's returns in relation to the performance of its designated market benchmark.
<b>Treynor Ratio</b>	- Similar to Sharpe ratio but utilizes beta rather than excess risk as determined by standard deviation. It is calculated by taking the excess rate of return above the risk free rate divided by beta to derive the absolute rate of return per unit of risk. A higher value indicates a product has achieved better historical risk-adjusted performance.
<b>Up Market Capture</b>	- The ratio of average portfolio performance over the designated benchmark during periods of positive returns. A higher value indicates better product performance.

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