



# PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS



**PERIOD ENDING: FEBRUARY 28, 2018**

Investment Performance Monthly Review for

**Merced County Employees' Retirement Association**

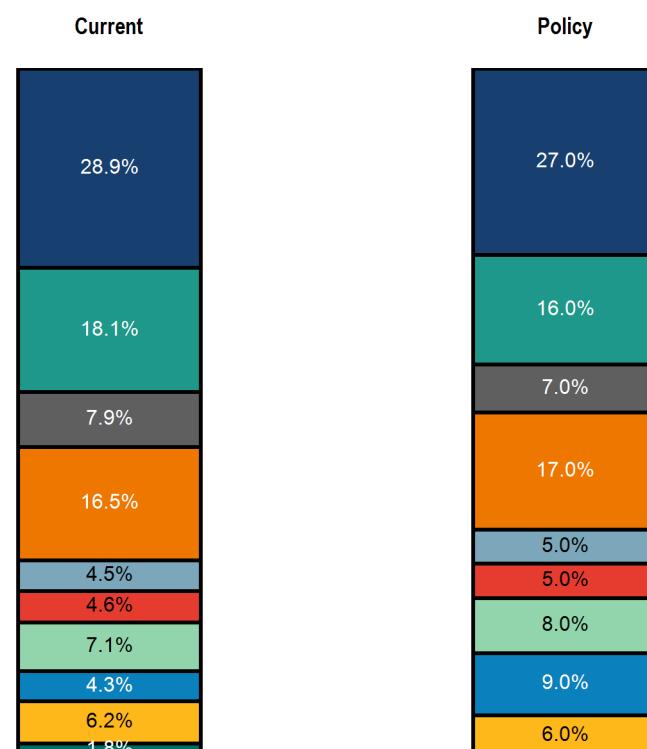
Total Fund  
Executive Summary (Net of Fees)

# Preliminary

Period Ending: February 28, 2018

	Market Value	% of Portfolio	1 Mo	Fiscal YTD	YTD
<b>Total Fund</b>	<b>815,987,927</b>	<b>100.0</b>	<b>-2.6</b>	<b>8.9</b>	<b>0.5</b>
Policy Index			-2.6	7.8	0.2
<b>Total Fund w/o Alternatives</b>	<b>619,624,539</b>	<b>75.9</b>	<b>-3.3</b>	<b>9.4</b>	<b>0.5</b>
Policy Index w/o AI			-3.0	8.8	0.4
<b>US Equity</b>	<b>236,149,714</b>	<b>28.9</b>	<b>-3.8</b>	<b>13.4</b>	<b>1.5</b>
80% R1000/ 20% R2000			-3.7	12.1	1.0
<b>International Equity</b>	<b>212,434,767</b>	<b>26.0</b>	<b>-4.3</b>	<b>12.9</b>	<b>1.2</b>
International Equity Custom			-4.5	13.2	1.2
<b>US Fixed Income</b>	<b>171,040,058</b>	<b>21.0</b>	<b>-0.9</b>	<b>-0.3</b>	<b>-1.6</b>
US Fixed Custom			-0.7	0.1	-1.3
<b>Hedge Fund</b>	<b>37,387,458</b>	<b>4.6</b>	<b>-0.4</b>	<b>7.1</b>	<b>3.0</b>
Hedge Fund Custom			-1.6	5.2	0.7
<b>Private Equity</b>	<b>35,184,164</b>	<b>4.3</b>	<b>0.0</b>	<b>9.9</b>	<b>0.0</b>
Thomson Reuters Cambridge Private Equity Index			0.0	3.9	0.0
<b>Real Assets</b>	<b>108,931,888</b>	<b>13.3</b>	<b>-1.2</b>	<b>5.4</b>	<b>-0.9</b>
Real Asset Custom			-2.5	6.0	-1.2
<b>Real Estate</b>	<b>58,096,870</b>	<b>7.1</b>	<b>0.0</b>	<b>4.5</b>	<b>0.0</b>
NCREIF ODCE net			0.0	3.5	0.0
<b>Infrastructure</b>	<b>13,028,049</b>	<b>1.6</b>	<b>0.0</b>	<b>11.7</b>	<b>0.0</b>
S&P Global Infrastructure			-6.7	-0.9	-5.6
<b>Natural Resources</b>	<b>6,290,493</b>	<b>0.8</b>	<b>0.0</b>	<b>3.5</b>	<b>0.0</b>
S&P Global Natural Resources			-5.1	20.2	-0.1

	Current	%	Policy	%
US Equity	\$236,149,714	28.9%	\$220,316,740	27.0%
International Equity	\$147,567,088	18.1%	\$130,558,068	16.0%
Emerging Market Equity	\$64,867,679	7.9%	\$57,119,155	7.0%
US Fixed Income	\$134,555,985	16.5%	\$138,717,948	17.0%
US Treasuries	\$36,484,073	4.5%	\$40,799,396	5.0%
Hedge Fund	\$37,387,458	4.6%	\$40,799,396	5.0%
Real Estate	\$58,096,870	7.1%	\$65,279,034	8.0%
Private Equity	\$35,184,164	4.3%	\$73,438,913	9.0%
Real Assets	\$50,835,017	6.2%	\$48,959,276	6.0%
Cash	\$14,859,878	1.8%	--	--
<b>Total</b>	<b>\$815,987,927</b>	<b>100.0%</b>	<b>\$815,987,927</b>	<b>100.0%</b>



See Policy Index and Benchmark History.

# Preliminary

Period Ending: February 28, 2018

	Market Value (\$)	% of Portfolio	1 Mo (%)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	15 Yrs (%)	Return (%)	Since
<b>Total Fund</b>	<b>815,987,927</b>	<b>100.0</b>	<b>-2.6</b>	<b>1.8</b>	<b>13.4</b>	<b>7.0</b>	<b>8.4</b>	--	--	--	-- Dec-94
<i>Policy Index<sup>1</sup></i>				-2.6	1.4	12.7	7.3	8.7	--	--	-- Dec-94
<b>Total Fund w/o Alternatives</b>	<b>619,624,539</b>	<b>75.9</b>	<b>-3.3</b>	<b>1.7</b>	<b>14.6</b>	<b>7.2</b>	<b>8.6</b>	<b>8.5</b>	--	--	-- Dec-94
<i>Policy Index w/o Al<sup>1</sup></i>				-3.0	1.6	13.6	7.0	8.1	--	--	-- Dec-94
<b>US Equity</b>	<b>236,149,714</b>	<b>28.9</b>	<b>-3.8</b>	<b>2.4</b>	<b>16.9</b>	<b>11.6</b>	<b>15.5</b>	<b>15.8</b>	--	--	-- Dec-94
<i>80% R1000/ 20% R2000<sup>1</sup></i>				-3.7	1.8	15.5	10.4	14.1	12.6	10.6	10.1 Dec-94
Mellon Dynamic US Equity <sup>2</sup>	76,490,882	9.4	-3.8	3.8	21.7	13.5	18.3	--	--	19.4	Dec-12
S&P 500				-3.7	3.0	17.1	11.1	14.7	13.1	10.4	15.6 Dec-12
Mellon Large Cap <sup>2</sup>	120,458,450	14.8	-3.7	2.8	16.6	--	--	--	--	17.8	Mar-16
Russell 1000				-3.7	2.7	16.7	10.8	14.6	13.0	10.6	17.8 Mar-16
DFA Small Cap	19,775,601	2.4	-4.4	-3.0	8.4	9.1	--	--	--	8.6	Jun-14
PanAgora	19,424,781	2.4	-3.7	0.0	9.5	7.8	--	--	--	10.4	Sep-13
Russell 2000				-3.9	-1.8	10.5	8.5	12.2	10.6	11.5	9.5 Sep-13
<b>International Equity</b>	<b>212,434,767</b>	<b>26.0</b>	<b>-4.3</b>	<b>3.4</b>	<b>24.0</b>	<b>6.3</b>	<b>6.5</b>	<b>5.0</b>	--	--	-- Dec-98
<i>International Equity Custom<sup>1</sup></i>				-4.5	3.5	23.8	7.4	7.4	5.5	9.0	4.8 Dec-98
Copper Rock	28,870,631	3.5	-4.1	2.1	26.4	7.6	--	--	--	8.8	Sep-13
MSCI World ex US Small Cap GD				-3.9	3.5	25.3	11.6	10.8	7.8	--	9.1 Sep-13
EARNEST Partners <sup>3</sup>	108,192	0.0									
Mellon International <sup>2</sup>	118,588,265	14.5	-4.5	1.9	20.8	--	--	--	--	15.4	Mar-16
MSCI EAFE Gross				-4.5	1.9	20.7	6.1	7.5	5.7	9.1	15.4 Mar-16
Wells Capital	64,867,679	7.9	-4.0	6.8	29.3	10.4	5.3	--	--	4.9	Mar-12
MSCI Emerging Markets Gross				-4.6	7.1	31.0	9.4	5.4	3.9	13.2	5.2 Mar-12
<b>US Fixed Income</b>	<b>171,040,058</b>	<b>21.0</b>	<b>-0.9</b>	<b>-1.2</b>	<b>1.0</b>	<b>1.9</b>	<b>2.3</b>	<b>3.5</b>	--	--	-- Dec-94
<i>US Fixed Custom<sup>1</sup></i>				-0.7	-0.9	1.4	2.0	2.3	3.2	4.1	5.7 Dec-94
Barrow Hanley	134,555,985	16.5	-0.9	-1.6	0.4	1.1	1.6	2.6	--	--	Mar-10
BBgBarc Aggregate <sup>1</sup>				-0.9	-1.6	0.5	1.1	1.6	2.9	--	3.3 Mar-10

1. See Policy Index and Benchmark History.

2. Market value and performance estimated based on benchmark return.

3. Liquidating as of 9/14/2016.

# Preliminary

Period Ending: February 28, 2018

	Market Value (\$)	% of Portfolio	1 Mo (%)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	15 Yrs (%)	Return (%)	Since
Vanguard <sup>4</sup>	36,484,073	4.5	--	--	--	--	--	--	--	--	-- Feb-18
BBgBarc US Govt 1-5 Yr TR			-0.1	-0.7	-0.4	0.5	0.6	1.0	2.4	--	-- Feb-18
<b>Hedge Fund</b>	<b>37,387,458</b>	<b>4.6</b>	<b>-0.4</b>	<b>3.8</b>	<b>12.4</b>	<b>3.9</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4.7</b>	<b>Jun-14</b>
Hedge Fund Custom <sup>1</sup>			-1.6	1.7	6.3	3.3	--	--	--	3.5	Jun-14
OZ Domestic II	17,779,626	2.2	0.2	4.7	13.3	5.9	--	--	--	6.7	Jun-14
Graham Absolute Return <sup>5</sup>	3,135,266	0.4	-0.9	5.3	--	--	--	--	--	4.5	Aug-17
Wellington-Archipelago <sup>5</sup>	3,131,281	0.4	-0.3	2.5	--	--	--	--	--	4.4	Aug-17
KLS Diversified <sup>6</sup>	3,057,321	0.4	0.0	1.4	--	--	--	--	--	1.6	Oct-17
Winton <sup>6</sup>	3,051,131	0.4	-5.0	1.7	--	--	--	--	--	1.7	Oct-17
Marshall Wace Eureka <sup>7</sup>	3,118,260	0.4	-0.5	3.9	--	--	--	--	--	3.9	Nov-17
Silver Point Capital <sup>7</sup>	4,114,573	0.5	0.7	2.9	--	--	--	--	--	2.9	Nov-17
<i>HFRI Fund of Funds Composite Index</i>			-1.6	1.7	6.5	2.2	3.7	2.6	3.7	1.7	Nov-17
<b>Private Equity<sup>+</sup></b>	<b>35,184,164</b>	<b>4.3</b>	<b>0.0</b>	<b>0.0</b>	<b>14.6</b>	<b>7.5</b>	<b>8.4</b>	<b>9.4</b>	<b>--</b>	<b>7.3</b>	<b>Jun-05</b>
Thomson Reuters Cambridge Private Equity Index <sup>1</sup>			0.0	0.0	13.1	10.0	16.8	--	--	--	Jun-05
Adams Street	7,891,882	1.0	0.0	0.0	12.0	9.7	13.2	13.5	--	6.2	Sep-05
Invesco IV	2,135,939	0.3	0.0	0.0	8.1	10.1	9.0	--	--	--	Jun-05
Invesco VI	5,539,203	0.7	0.0	0.0	11.7	15.1	--	--	--	11.2	Jun-13
Ocean Avenue II	8,174,990	1.0	0.0	0.0	34.5	11.6	--	--	--	7.6	Jun-14
Pantheon I	1,329,940	0.2	0.0	0.0	10.1	4.3	6.8	--	--	--	Dec-05
Pantheon II	3,831,870	0.5	0.0	0.0	17.8	11.5	14.8	--	--	11.2	Dec-11
Pantheon Secondary	1,433,961	0.2	0.0	0.0	8.5	2.0	1.7	--	--	--	Jun-07
Raven Asset Fund II	4,846,380	0.6	0.0	0.0	3.0	-4.7	--	--	--	-6.2	Aug-14
<i>Thomson Reuters Cambridge Private Equity Index</i>			0.0	0.0	13.1	10.0	16.8	--	--	11.4	Aug-14

+ Private Equity Managers are valued at a quarter lag.

4. Funded on 2/26/2018

5. Funded on 8/31/2017

6. Funded on 10/31/2017

7. Funded on 11/29/2017

Total Fund  
Performance Summary (Net)

# Preliminary

Period Ending: February 28, 2018

	Market Value (\$)	% of Portfolio	1 Mo (%)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	15 Yrs (%)	Return (%)	Since
<b>Real Assets</b>	<b>108,931,888</b>	<b>13.3</b>	<b>-1.2</b>	<b>1.2</b>	<b>7.4</b>	<b>7.6</b>	<b>7.9</b>	<b>8.5</b>	<b>--</b>	<b>--</b>	<b>Mar-99</b>
Real Asset Custom <sup>1</sup>				-2.5	0.9	9.8	--	--	--	--	Mar-99
SSgA <sup>8</sup>	31,516,475	3.9	-3.9	-0.7	--	--	--	--	--	4.4	Apr-17
Real Asset Custom				-2.5	0.9	9.8	--	--	--	7.8	Apr-17
<b>Real Estate</b>	<b>58,096,870</b>	<b>7.1</b>	<b>0.0</b>	<b>2.6</b>	<b>6.6</b>	<b>7.5</b>	<b>7.9</b>	<b>8.4</b>	<b>--</b>	<b>--</b>	<b>Mar-99</b>
NCREF ODCE net <sup>1</sup>				0.0	1.9	6.7	9.4	10.2	10.9	--	Mar-99
Greenfield Gap VII	12,289,707	1.5	0.0	0.0	8.9	13.1	--	--	--	12.2	Dec-14
Patron Capital V	3,815,109	0.5	0.0	20.1	36.0	--	--	--	--	9.1	Jan-16
NCREF CEVA 1Q Lag - NET				0.0	3.0	10.2	13.4	--	--	11.1	Jan-16
UBS Trumbull Property	41,923,424	5.1	0.0	2.1	4.5	7.5	8.5	--	--	--	Mar-99
Carlyle Realty VIII <sup>9</sup>	68,630	0.0	0.0	0.0	--	--	--	--	--	0.0	Dec-17
NCREF ODCE net				0.0	1.9	6.7	9.4	10.9	11.6	9.6	Dec-17
<b>Infrastructure</b>	<b>13,028,049</b>	<b>1.6</b>	<b>0.0</b>	<b>0.0</b>	<b>22.4</b>	<b>6.4</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>6.0</b>	<b>Dec-14</b>
S&P Global Infrastructure <sup>1</sup>				-6.7	-6.4	8.6	8.3	--	--	7.9	Dec-14
KKR Global II	8,588,150	1.1	0.0	0.0	21.4	10.7	--	--	--	10.1	Dec-14
North Haven Infrastructure II	4,439,899	0.5	0.0	0.0	24.3	--	--	--	--	5.4	May-15
S&P Global Infrastructure				-6.7	-6.4	8.6	8.3	--	--	8.5	May-15
<b>Natural Resources</b>	<b>6,290,493</b>	<b>0.8</b>	<b>0.0</b>	<b>0.0</b>	<b>8.2</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>19.9</b>	<b>Sep-15</b>
S&P Global Natural Resources <sup>1</sup>				-5.1	5.6	18.9	--	--	--	12.5	Sep-15
EnCap XI <sup>10</sup>	151,648	0.0	0.0	0.0	--	--	--	--	--	-31.0	Jul-17
EnCap IV <sup>11</sup>	120,404	0.0	--	--	--	--	--	--	--	--	Feb-18
GSO Energy Opportunities	3,540,800	0.4	0.0	0.0	7.6	--	--	--	--	20.8	Nov-15
Taurus Mining	1,690,975	0.2	0.0	0.0	2.0	--	--	--	--	17.8	Sep-15
Taurus Mining Annex <sup>12</sup>	786,666	0.1	0.0	0.0	38.5	--	--	--	--	35.0	Jan-17
S&P Global Natural Resources				-5.1	5.6	18.9	5.7	2.4	-0.4	--	Jan-17
Cash	9,584,074	1.2	0.1	0.3	1.2	0.8	0.7	-6.7	--	--	Sep-03
Treasury Cash	5,275,804	0.6	--	--	--	--	--	--	--	--	Sep-11

8. Funded on 4/3/2017

9. Funded on 12/4/2017

10. Funded on 7/17/2017

11. Funded on 2/5/2018

12. Funded on 1/31/2017

# Preliminary

Period Ending: February 28, 2018

	Market Value (\$)	% of Portfolio	1 Mo (%)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	Return (%)	Since
<b>Total Fund</b>	<b>815,987,927</b>	<b>100.0</b>	<b>-2.5</b>	<b>1.8</b>	<b>13.7</b>	<b>7.3</b>	<b>8.8</b>	<b>8.0</b>	<b>6.2</b>	--	Dec-94
Policy Index <sup>1</sup>			-2.6	1.4	12.7	7.3	8.7	--	--	--	Dec-94
<b>Total Fund w/o Alternatives</b>	<b>619,624,539</b>	<b>75.9</b>	<b>-3.2</b>	<b>1.8</b>	<b>14.9</b>	<b>7.5</b>	<b>9.0</b>	<b>8.0</b>	<b>--</b>	--	Dec-94
Policy Index w/o AI <sup>1</sup>			-3.0	1.6	13.6	7.0	8.1	--	--	--	Dec-94
<b>US Equity</b>	<b>236,149,714</b>	<b>28.9</b>	<b>-3.7</b>	<b>2.5</b>	<b>17.1</b>	<b>11.8</b>	<b>15.7</b>	<b>13.0</b>	<b>10.1</b>	--	Dec-94
80% R1000/ 20% R2000 <sup>1</sup>			-3.7	1.8	15.5	10.4	14.1	12.6	9.7	10.1	Dec-94
Mellon Dynamic US Equity <sup>2</sup>	76,490,882	9.4	-3.7	3.9	22.0	13.8	18.5	--	--	19.7	Dec-12
S&P 500			-3.7	3.0	17.1	11.1	14.7	13.1	9.7	15.6	Dec-12
Mellon Large Cap <sup>2</sup>	120,458,450	14.8	-3.7	2.8	16.7	--	--	--	--	17.9	Mar-16
Russell 1000			-3.7	2.7	16.7	10.8	14.6	13.0	9.8	17.8	Mar-16
DFA Small Cap	19,775,601	2.4	-4.4	-2.9	8.8	9.5	--	--	--	8.9	Jun-14
PanAgora	19,424,781	2.4	-3.5	0.2	10.4	8.6	--	--	--	11.2	Sep-13
Russell 2000			-3.9	-1.8	10.5	8.5	12.2	10.6	9.7	9.5	Sep-13
<b>International Equity</b>	<b>212,434,767</b>	<b>26.0</b>	<b>-4.2</b>	<b>3.5</b>	<b>24.5</b>	<b>6.9</b>	<b>7.2</b>	<b>5.7</b>	<b>4.3</b>	--	Dec-98
International Equity Custom <sup>1</sup>			-4.5	3.5	23.8	7.4	7.4	5.5	3.1	4.8	Dec-98
Copper Rock	28,870,631	3.5	-3.9	2.3	27.4	8.6	--	--	--	9.7	Sep-13
MSCI World ex US Small Cap GD			-3.9	3.5	25.3	11.6	10.8	7.8	--	9.1	Sep-13
EARNEST Partners <sup>3</sup>	108,192	0.0									
Mellon International <sup>2</sup>	118,588,265	14.5	-4.5	1.9	20.8	--	--	--	--	15.4	Mar-16
MSCI EAFE Gross			-4.5	1.9	20.7	6.1	7.5	5.7	3.3	15.4	Mar-16
Wells Capital	64,867,679	7.9	-3.8	7.1	30.5	11.5	6.3	--	--	5.9	Mar-12
MSCI Emerging Markets Gross			-4.6	7.1	31.0	9.4	5.4	3.9	3.0	5.2	Mar-12
<b>US Fixed Income</b>	<b>171,040,058</b>	<b>21.0</b>	<b>-0.9</b>	<b>-1.2</b>	<b>1.1</b>	<b>2.1</b>	<b>2.5</b>	<b>3.9</b>	<b>3.5</b>	--	Dec-94
US Fixed Custom <sup>1</sup>			-0.7	-0.9	1.4	2.0	2.3	3.2	3.9	5.7	Dec-94
Barrow Hanley	134,555,985	16.5	-0.9	-1.6	0.7	1.4	1.9	3.2	--	3.5	Mar-10
BBgBarc Aggregate <sup>1</sup>			-0.9	-1.6	0.5	1.1	1.6	2.9	--	3.3	Mar-10

1. See Policy Index and Benchmark History.

2. Market value and performance estimated based on benchmark return.

3. Liquidating as of 9/14/2016.

Effective 1/1/2017, only traditional asset class (public equity, public fixed income, REITs) investment management fees will be included in the gross of fee return calculation.

# Preliminary

Period Ending: February 28, 2018

	Market Value (\$)	% of Portfolio	1 Mo (%)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	Return (%)	Since
Vanguard <sup>4</sup>	36,484,073	4.5	--	--	--	--	--	--	--	--	-- Feb-18
BBgBarc US Govt 1-5 Yr TR			-0.1	-0.7	-0.4	0.5	0.6	1.0	1.7	--	-- Feb-18
<b>Hedge Fund</b>	<b>37,387,458</b>	<b>4.6</b>	<b>-0.4</b>	<b>3.8</b>	<b>12.4</b>	<b>3.9</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4.7</b>	<b>Jun-14</b>
Hedge Fund Custom <sup>1</sup>			-1.6	1.7	6.3	3.3	--	--	--	--	3.5 Jun-14
OZ Domestic II	17,779,626	2.2	0.2	4.7	13.3	5.9	--	--	--	--	6.7 Jun-14
Graham Absolute Return <sup>5</sup>	3,135,266	0.4	-0.9	5.3	--	--	--	--	--	--	4.5 Aug-17
Wellington-Archipelago <sup>5</sup>	3,131,281	0.4	-0.3	2.5	--	--	--	--	--	--	4.4 Aug-17
KLS Diversified <sup>6</sup>	3,057,321	0.4	0.0	1.4	--	--	--	--	--	--	1.6 Oct-17
Winton <sup>6</sup>	3,051,131	0.4	-5.0	1.7	--	--	--	--	--	--	1.7 Oct-17
Marshall Wace Eureka <sup>7</sup>	3,118,260	0.4	-0.5	3.9	--	--	--	--	--	--	3.9 Nov-17
Silver Point Capital <sup>7</sup>	4,114,573	0.5	0.7	2.9	--	--	--	--	--	--	2.9 Nov-17
HFRI Fund of Funds Composite Index			-1.6	1.7	6.5	2.2	3.7	2.6	1.3	--	1.7 Nov-17
<b>Private Equity<sup>+</sup></b>	<b>35,184,164</b>	<b>4.3</b>	<b>0.0</b>	<b>0.0</b>	<b>14.6</b>	<b>7.5</b>	<b>8.4</b>	<b>9.8</b>	<b>7.2</b>	<b>7.5</b>	<b>Jun-05</b>
Thomson Reuters Cambridge Private Equity Index <sup>1</sup>			0.0	0.0	13.1	10.0	16.8	--	--	--	Jun-05
Adams Street	7,891,882	1.0	0.0	0.0	12.0	9.7	13.3	14.3	9.3	10.2	Sep-05
Invesco IV	2,135,939	0.3	0.0	0.0	8.1	10.1	9.0	11.1	9.1	9.0	Jun-05
Invesco VI	5,539,203	0.7	0.0	0.0	11.7	15.1	--	--	--	11.2	Jun-13
Ocean Avenue II	8,174,990	1.0	0.0	0.0	34.5	11.6	--	--	--	7.6	Jun-14
Pantheon I	1,329,940	0.2	0.0	0.0	10.1	4.3	6.8	--	--	--	Dec-05
Pantheon II	3,831,870	0.5	0.0	0.0	17.8	11.5	14.8	--	--	11.7	Dec-11
Pantheon Secondary	1,433,961	0.2	0.0	0.0	8.5	2.0	1.7	--	--	--	Jun-07
Raven Asset Fund II	4,846,380	0.6	0.0	0.0	3.0	-4.7	--	--	--	-6.2	Aug-14
Thomson Reuters Cambridge Private Equity Index			0.0	0.0	13.1	10.0	16.8	--	--	11.4	Aug-14

+ Private Equity Managers are valued at a quarter lag.

4. Funded on 2/26/2018

5. Funded on 8/31/2017

6. Funded on 10/31/2017

7. Funded on 11/29/2017

Total Fund  
Performance Summary (Gross)

# Preliminary

Period Ending: February 28, 2018

	Market Value (\$)	% of Portfolio	1 Mo (%)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	Return (%)	Since
<b>Real Assets</b>	<b>108,931,888</b>	<b>13.3</b>	<b>-1.2</b>	<b>1.2</b>	<b>7.4</b>	<b>8.4</b>	<b>8.9</b>	<b>9.4</b>	<b>--</b>	<b>--</b>	<b>Mar-99</b>
Real Asset Custom <sup>1</sup>				-2.5	0.9	9.8	--	--	--	--	Mar-99
SSgA <sup>8</sup>	31,516,475	3.9	-3.9	-0.7	--	--	--	--	--	4.4	Apr-17
Real Asset Custom			-2.5	0.9	9.8	--	--	--	--	7.8	Apr-17
<b>Real Estate</b>	<b>58,096,870</b>	<b>7.1</b>	<b>0.0</b>	<b>2.6</b>	<b>6.6</b>	<b>8.4</b>	<b>8.9</b>	<b>9.5</b>	<b>5.2</b>	<b>8.7</b>	<b>Mar-99</b>
NCREF ODCE net <sup>1</sup>				0.0	1.9	6.7	9.4	10.2	10.9	--	Mar-99
Greenfield Gap VII	12,289,707	1.5	0.0	0.0	8.9	14.2	--	--	--	14.1	Dec-14
Patron Capital V	3,815,109	0.5	0.0	20.1	36.0	--	--	--	--	9.1	Jan-16
NCREF CEVA 1Q Lag - NET				0.0	3.0	10.2	13.4	--	--	11.1	Jan-16
UBS Trumbull Property	41,923,424	5.1	0.0	2.1	4.5	8.1	9.3	--	--	--	Mar-99
Carlyle Realty VIII <sup>9</sup>	68,630	0.0	0.0	0.0	--	--	--	--	--	0.0	Dec-17
NCREF ODCE net				0.0	1.9	6.7	9.4	10.9	11.6	6.9	Dec-17
<b>Infrastructure</b>	<b>13,028,049</b>	<b>1.6</b>	<b>0.0</b>	<b>0.0</b>	<b>22.4</b>	<b>6.4</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>6.0</b>	<b>Dec-14</b>
S&P Global Infrastructure <sup>1</sup>				-6.7	-6.4	8.6	8.3	--	--	7.9	Dec-14
KKR Global II	8,588,150	1.1	0.0	0.0	21.4	10.7	--	--	--	10.1	Dec-14
North Haven Infrastructure II	4,439,899	0.5	0.0	0.0	24.3	--	--	--	--	5.4	May-15
S&P Global Infrastructure				-6.7	-6.4	8.6	8.3	--	--	8.5	May-15
<b>Natural Resources</b>	<b>6,290,493</b>	<b>0.8</b>	<b>0.0</b>	<b>0.0</b>	<b>8.2</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>19.9</b>	<b>Sep-15</b>
S&P Global Natural Resources <sup>1</sup>				-5.1	5.6	18.9	--	--	--	12.5	Sep-15
EnCap XI <sup>10</sup>	151,648	0.0	0.0	0.0	--	--	--	--	--	-31.0	Jul-17
EnCap IV <sup>11</sup>	120,404	0.0	--	--	--	--	--	--	--	--	Feb-18
GSO Energy Opportunities	3,540,800	0.4	0.0	0.0	7.6	--	--	--	--	20.8	Nov-15
Taurus Mining	1,690,975	0.2	0.0	0.0	2.0	--	--	--	--	17.8	Sep-15
Taurus Mining Annex <sup>12</sup>	786,666	0.1	0.0	0.0	38.5	--	--	--	--	35.0	Jan-17
S&P Global Natural Resources				-5.1	5.6	12.3	3.7	1.3	-1.2	-0.7	Jan-17
Cash	9,584,074	1.2	0.1	0.3	1.2	0.8	0.7	0.7	4.0	4.2	Sep-03
Treasury Cash	5,275,804	0.6	--	--	--	--	--	--	--	--	Sep-11

8. Funded on 4/3/2017

9. Funded on 12/4/2017

10. Funded on 7/17/2017

11. Funded on 2/6/2018

12. Funded on 1/31/2017

Total Plan Policy Index	As of:									
	7/1/17	1/1/17	1/1/15	7/1/14	7/1/13	6/1/13	4/1/13	4/1/12	1/1/10	
91-day US T Bill										
BBgBarc Aggregate	17%	17%	21%	21%	29%	29%	24%	24%	24%	
BBgBarc US TIPS							5%	5%	5%	
BofA ML High Yield II			5%	5%	5%	5%	5%	5%	5%	
CPI +4%										
Credit Suisse Leveraged Loan	5%	5%	3%	3%						
FTSE NAREIT Developed				1%	2%	2%	2%	2%	2%	2.0%
FTSE NAREIT Developed ex US				1%						
HFRI Fund of Funds Composite	5%	2.5%	2.3%	5%						
HFRI RV Multi-strategy		2.5%	2.3%							
MSCI ACWI ex US			24%	24%	24%					
MSCI EAFE	16%	16%				20%	20%	20%	24%	
MSCI Emerging Markets	7%	7%				4%	4%	4%		
NCREIF										
NCREIF ODCE				5%	6%	6%	6%	6%	6%	
NCREIF ODCE net	8%	8%	8%							
Russell 1000	22%	22%	23%	23%	25%	25%				
Russell 2000	5%	5%	6%	6%	4%	4%	6%	6%	4%	
Russell 3000 +3% 1QL (PE)		9%	7%	7%	5%	5%	5%			
S&P 400						4%	4%			
S&P 500							19%	19%	25%	
S&P 500 +5% (PE)								5%	5%	
S&P Global Infrastructure	3%	3%								
S&P Global Natural Resources	3%	3%								
Thomson Reuters Cambridge Private Equity	9%									
Wilshire RE										
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Total Plan Policy Index	As of:							
	10/1/08	7/1/08	1/1/08	4/1/07	4/1/05	1/1/02	1/1/99	1/1/95
91-day US T Bill								
BBgBarc Aggregate			1%	1%	1%	1%	1%	1%
BBgBarc US TIPS	23%	23%	30%	30%	30%	38%	38%	
BofA ML High Yield II								
CPI +4%								
Credit Suisse Leveraged Loan								100%
FTSE NAREIT Developed								
FTSE NAREIT Developed ex US								
HFRI Fund of Funds Composite								
HFRI RV Multi-strategy								
MSCI ACWI ex US								
MSCI EAFE								
MSCI Emerging Markets	18%	18%	7%	7%	7%	6%	6%	
NCREIF								
NCREIF ODCE	6%	6%	6%	6%	6%	5%		
NCREIF ODCE net								
Russell 1000								
Russell 2000								
Russell 3000 +3% 1QL (PE)	6%	6.25%	7.65%	7.9%	7.7%	8%	8%	
S&P 400								
S&P 500								
S&P 500 +5% (PE)	43%	43.75%	46.35%	47.1%	48.3%	42%	42%	
Wilshire RE	4%	3%	2%	1%				
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Total Plan w/o AI Policy Index	As of:				
	1/1/17	7/1/14	7/1/13	6/1/13	4/1/13
91-day US T Bill					
BBgBarc Aggregate	24%	25%	33%	33%	27%
BBgBarc US TIPS					6%
BofA ML High Yield II		6%	6%	6%	6%
CPI +4%					
Credit Suisse Leveraged Loan	7%	4%			
FTSE NAREIT Developed				2%	2%
FTSE NAREIT Developed ex US					
HFRI Fund of Funds Composite					
HFRI RV Multi-strategy					
MSCI ACWI ex US		29%	28%		
MSCI EAFE	22%			22%	22%
MSCI Emerging Markets	10%			4%	4%
NCREIF					
NCREIF ODCE					
NCREIF ODCE net					
Russell 1000	31%	28%	29%	28%	
Russell 2000	7%	7%	5%	4%	7%
Russell 3000 +3% 1QL (PE)					
S&P 400					4%
S&P 500					21%
S&P 500 +5% (PE)					
S&P Global Infrastructure					
S&P Global Natural Resources					
Wilshire RE					
	100.0%	100.0%	100.0%	100.0%	100.0%

US Equity Benchmark		As of:			Infrastructure Benchmark		As of:	
		7/1/14	6/1/13	1/1/95			1/1/17	12/31/14
Russell 1000		80%	86%		S&P Global Infrastructure		100%	
Russell 2000		20%	14%		CPI-U Headline +5%			100%
Russell 3000				100%			100.0%	100.0%
		100.0%	100.0%	100.0%				
International Equity Benchmark		As of:			Natural Resources Benchmark		As of:	
		1/1/17	7/1/13	4/1/12	1/1/99		1/1/17	9/30/15
MSCI ACWI ex US			100%		S&P Global Natural Resources		100%	
MSCI EAFE		69.6%		83.3%	100%	CPI-U Headline +5%		100%
MSCI Emerging Markets		30.4%		16.7%			100.0%	100.0%
		100.0%	100.0%	100.0%				
Fixed Income Benchmark		As of:			Real Asset Benchmark		As of:	
		1/1/17	8/1/14	7/1/14	6/1/13	4/1/13	1/1/17	
BBgBarc Aggregate		77.3%	71.9%	82.5%	85.3%	70.6%	100.0%	
BBgBarc US TIPS						14.7%		
BofA ML High Yield II			17.5%	17.5%	14.7%	14.7%		
Credit Suisse Leveraged Loan		22.7%	10.5%					
		100.0%	100.0%	100.0%	100.0%	100.0%		
Hedge Fund Benchmark		As of:			Real Asset Benchmark		As of:	
		7/1/17	1/1/15	7/1/14			1/1/17	
HFRI Fund of Funds Composite		100%	50%	100%	NCREIF ODCE net		57.1%	
HFRI RV Multi-strategy			50%		S&P Global Infrastructure		21.4%	
		100.0%	100.0%	100.0%	S&P Global Natural Resources		21.4%	
							100.0%	
Real Estate Benchmark		As of:						
		1/1/15	7/1/14	1/1/10	1/1/02	4/1/99		
FTSE NAREIT Developed			17.5%					
FTSE NAREIT Developed ex US			16.3%					
NCREIF				100%				
NCREIF ODCE			66.3%	75%				
NCREIF ODCE net		100%						
Wilshire RE				100%				
		100.0%	100.0%	100.0%	100.0%	100.0%		
Private Equity Benchmark		As of:						
		7/1/17	4/1/13	7/1/05				
Russell 3000 +3% 1QL			100%					
S&P 500 +5%				100%				
Thomson Reuters Cambridge Private Equity		100%						
		100.0%	100.0%	100.0%				

<b>Barrow Hanley Benchmark</b>	<b>As of:</b>	
	<b>6/1/13</b>	<b>4/1/10</b>
BBgBarc Aggregate	100%	82.8%
BBgBarc US TIPS		17.2%
	<b>100.0%</b>	<b>100.0%</b>

<b>UBS Trumbull Benchmark</b>	<b>As of:</b>			
	<b>1/1/15</b>	<b>1/1/10</b>	<b>1/1/02</b>	<b>4/1/99</b>
NCREIF			100%	
NCREIF ODCE		100%		
NCREIF ODCE net	100%			
Wilshire RE			100%	
	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

<b>KKR Global Benchmark</b>	<b>As of:</b>	
	<b>1/1/17</b>	<b>12/31/14</b>
S&P Global Infrastructure	100%	
CPI-U Headline +5%		100%
	<b>100.0%</b>	<b>100.0%</b>

<b>North Haven Benchmark</b>	<b>As of:</b>	
	<b>1/1/17</b>	<b>5/31/15</b>
S&P Global Infrastructure	100%	
CPI-U Headline +5%		100%
	<b>100.0%</b>	<b>100.0%</b>

<b>GSO Benchmark</b>	<b>As of:</b>	
	<b>1/1/17</b>	<b>11/30/15</b>
S&P Global Natural Resources	100%	
CPI-U Headline +5%		100%
	<b>100.0%</b>	<b>100.0%</b>

<b>Taurus Mining Benchmark</b>	<b>As of:</b>	
	<b>1/1/17</b>	<b>9/30/15</b>
S&P Global Natural Resources	100%	
CPI-U Headline +5%		100%
	<b>100.0%</b>	<b>100.0%</b>