

**State Universities Retirement System  
of Illinois (SURS)**

**Investment Update**



**March 2019**

**Volume 29, Issue 9**

	March 2019	Quarter Ended	Fiscal Y-T-D	1 Year Ended <sup>1</sup>	3 Years Ended <sup>1</sup>	5 Years Ended <sup>1</sup>	10 Years Ended <sup>1</sup>
<b>SURS TOTAL FUND</b>	1.1%	8.1%	3.0%	4.0%	8.3%	6.1%	10.7%
Market Goal / Policy Portfolio	0.4%	7.1%	2.9%	3.7%	8.1%	6.1%	10.9%
Public Funds Index	1.3%	9.3%	3.5%	4.7%	8.7%	6.2%	10.0%

Policy Portfolio Benchmark consists of 23% of U.S. Equities (Dow Jones U.S. Total Stock Market), 19% Non-U.S. Equities (MSCI ACWI ex-US), 8% Global Equities (MSCI ACWI), 6% Private Equity (Dow Jones U.S. Total Stock Market + 3%), 19% Fixed Income (Bloomberg Barclays U.S. Aggregate), 4% TIPS (Bloomberg Barclays U.S. TIPS), 3% Emerging Market Debt (Blended Benchmark), 6% Direct Real Estate (NCREIF ODCE Index), 4% REITs (Blended Benchmark), 2% Commodities (Bloomberg Commodity Index), 5% Hedge Funds (Blended Benchmark) and 1% Opportunity Fund (Blended Benchmark).

Asset Allocation and Target %'s	Total Fund \$'s (millions)	Cash Overlay Adjustment	Adjusted Asset Alloc	Passive*	Structured Active	Active	Adjusted Asset Alloc %	Interim Policy %	Strategic Policy %
U.S. Equity	\$ 4,368	\$ 79	\$ 4,446	12.4%	5.8%	5.0%	23.1%	23.0%	23.0%
Private Equity	1,306		1,306	0.0%	0.0%	6.8%	6.8%	6.0%	6.0%
Non-U.S. Equity	3,681	12	3,692	7.7%	5.6%	5.9%	19.2%	19.0%	19.0%
Global Equity	1,786	(150)	1,636	-0.8%	0.0%	9.3%	8.5%	8.0%	8.0%
Fixed Income	3,731	40	3,771	3.7%	0.0%	15.9%	19.6%	19.0%	19.0%
TIPS	708		708	3.7%	0.0%	0.0%	3.7%	4.0%	4.0%
Emerging Market Debt	594		594	0.0%	0.0%	3.1%	3.1%	3.0%	3.0%
Real Estate	1,712	0	1,712	3.2%	0.0%	5.7%	8.9%	10.0%	10.0%
Hedged Strategies	850		850	0.0%	0.0%	4.4%	4.4%	5.0%	5.0%
Commodities	360	20	379	0.1%	0.0%	1.9%	2.0%	2.0%	2.0%
Opportunity Fund	129		129	0.0%	0.0%	0.7%	0.7%	1.0%	1.0%
<b>Total Fund</b>	<b>\$ 19,223</b>	<b>\$ 0</b>	<b>\$ 19,223</b>	<b>30.0%</b>	<b>11.4%</b>	<b>58.6%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

\*Implementation of the cash overlay program is reflected in Passive investments.

## Total Fund Summary

SURS total fund returned 1.1% for March, exceeding the Market Goal's return of 0.4%.

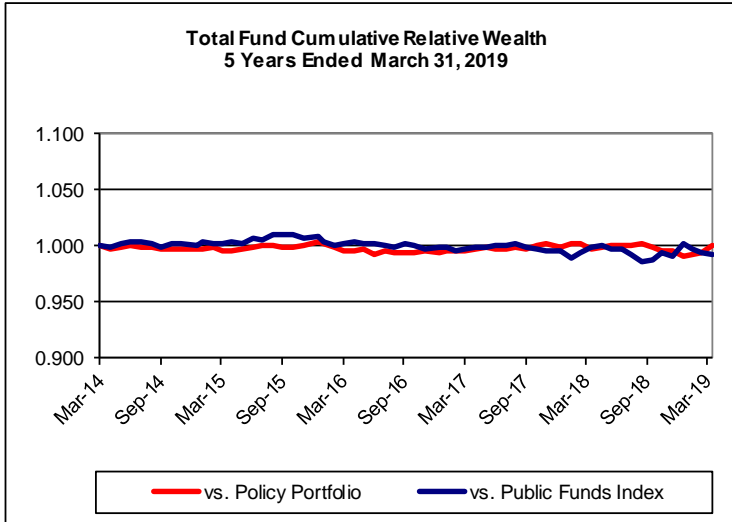
The higher return relative to the Market Goal during March was due primarily to:

- Above benchmark performance in the Non-U.S. Equity, Global Equity, Private Equity, TIPS, REITs, and Commodities asset classes, which was partially offset by
- Below benchmark performance in the U.S. Equity, Core Fixed Income, Hedged Strategies, and Opportunity Fund asset classes. In addition, the portfolio was positively impacted by
- An above target allocation to the U.S. Equity, Non-U.S. Equity, Global Equity, and Core Fixed Income asset classes, four of the better absolute performing asset classes as measured against the Market Goal, and
- A below target allocation to the Commodities and Opportunity Fund asset classes, two of the poorer absolute performing asset classes as measured against the Market Goal.

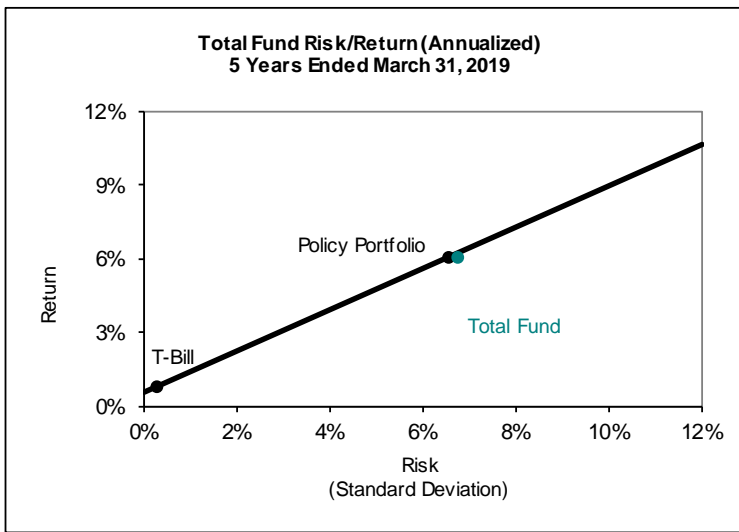
Investment Management Firms Utilized by SURS		
Emerging, Minority, Women and Disabled Ownership as of March 2019		
	Actual	Goal
As a % of Total Assets	30.0%	
As a % of Total Assets, per Public Act 96-0006	18.1%	20.0%
As a % of Total Actively-Managed Assets, per Public Act 96-0006	24.4%	25.0%

## Longer-Term Results

The longer-term results, as indicated in the two graphs below, reflect how SURS compares on both an absolute and a risk-adjusted basis.



As the chart on the left indicates, SURS has performed in line with the Policy Portfolio for the past several years. The ending values indicate that over the past five years, SURS has performed approximately 0.1% ahead of the Policy Portfolio. The chart also indicates that during the same time period, SURS portfolio has underperformed the median Public Funds Index by approximately 0.8%.



The chart to the left indicates that SURS total fund return has measured approximately the same level of volatility as the policy portfolio during the past five years. In addition, the chart also indicates that SURS has achieved approximately the same return with a similar level of volatility. This can be determined by the teal marker, indicating SURS total fund, being located on the line with the policy portfolio marker.

On a risk-adjusted basis, SURS has trailed its benchmark for the five-year period by 17 basis points on an annualized basis (6.08% versus required return of 6.25%).

<b>SURS Total Fund Investment Performance</b>			
<b>As of March 2019</b>			
	<b>SURS Fund</b>	<b>CPI-U *</b>	<b>SURS Real Return</b>
<b>1 Year Ended</b>	4.0%	1.9%	2.1%
<b>5 Years Ended</b>	6.1%	1.5%	4.6%
<b>10 Years Ended</b>	10.7%	1.8%	8.9%
<b>20 Years Ended</b>	6.3%	2.2%	4.1%
<b>25 Years Ended</b>	8.1%	2.2%	5.9%
<b>30 Years Ended</b>	8.2%	2.5%	5.8%
<b>Since October 1981</b>	9.8%	2.7%	7.0%

\* CPI-U includes food and energy prices.

\*\* SURS inflation assumption is 2.25%.

The returns and commentary for the twelve major asset portfolios follow.

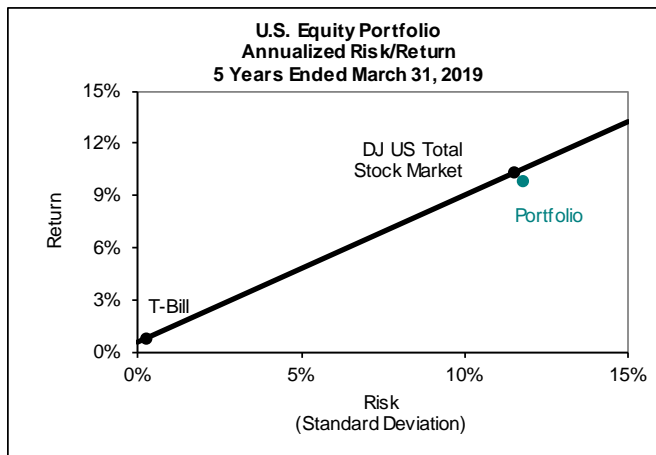
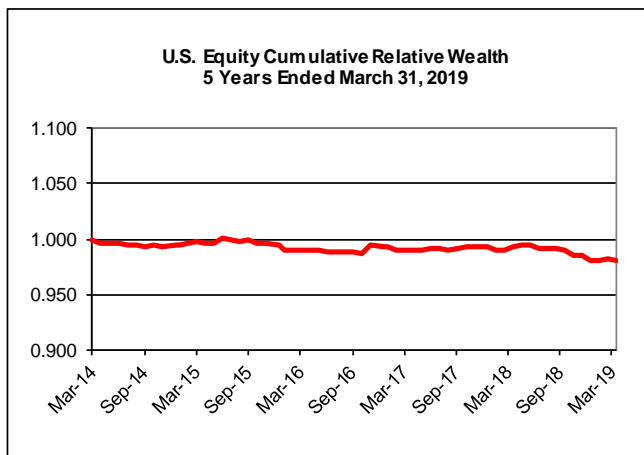
## U.S. Equities

U.S. Equities experienced positive returns for the month of March. The broad market, as measured by the Dow Jones U.S. Total Stock Market (TSM) Index, posted a return of 1.4% for the month. During March, large cap outperformed small cap stocks, and the performance of growth versus value stocks was mixed. SURS portfolio underperformed the benchmark for the month, returning 1.2%.

	March 2019	FYTD	1 YR	3 YR	5 YR	10 YR
<b>SURS</b>	<b>1.2%</b>	<b>3.4%</b>	<b>7.3%</b>	<b>13.1%</b>	<b>9.9%</b>	<b>16.2%</b>
Performance Benchmark	1.4%	4.6%	8.7%	13.5%	10.3%	16.0%
DJ U.S. Total Stock Market	1.4%	4.6%	8.7%	13.5%	10.3%	16.0%
DJ U.S. Large Cap TSM	1.8%	5.7%	9.4%	13.6%	10.8%	15.9%
DJ U.S. Lrg Cap Growth TSM	2.4%	5.1%	10.1%	16.4%	12.6%	16.9%
DJ U.S. Lrg Cap Value TSM	0.9%	5.5%	6.7%	11.2%	8.8%	14.5%
DJ U.S. Small Cap TSM	-1.7%	-3.8%	3.8%	12.4%	7.2%	17.1%
DJ U.S. Sm Cap Growth TSM	-1.9%	-2.7%	3.6%	14.7%	7.3%	17.6%
DJ U.S. Sm Cap Value TSM	-1.6%	-5.0%	3.9%	9.9%	7.0%	16.5%
S&P 500	1.9%	5.9%	9.5%	13.5%	10.9%	15.9%
Russell 3000	1.5%	4.7%	8.8%	13.5%	10.4%	16.0%
Russell 2000	-2.1%	-5.3%	2.0%	12.9%	7.1%	15.4%

### Longer-Term Results

The five-year cumulative relative wealth chart, below (left) indicates that SURS U.S. Equity portfolio has trailed its benchmark return by approximately 1.96%. On a risk-adjusted basis, SURS U.S. Equity portfolio return trailed its benchmark by 65 basis points while incurring slightly greater risk than the benchmark. SURS portfolio has returned 9.86%, while the risk-adjusted benchmark return is 10.51%.



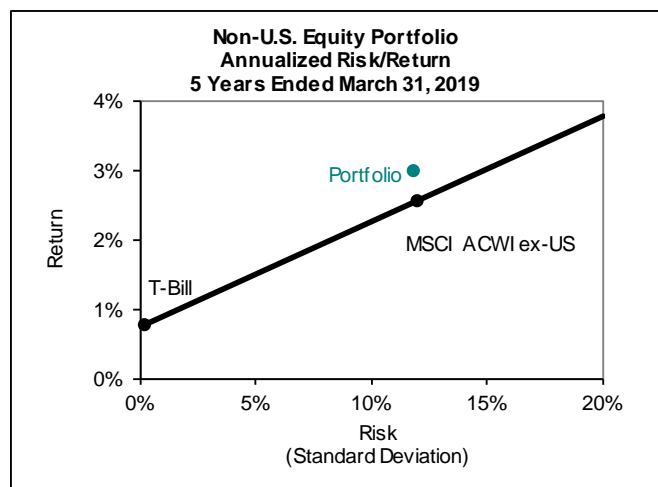
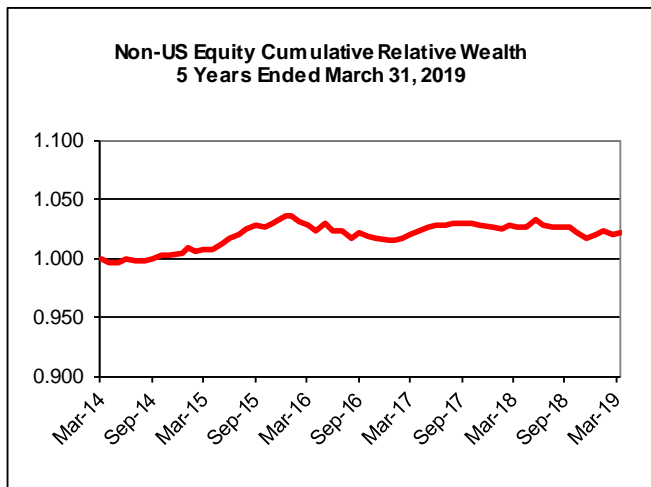
## Non-U.S. Equities

Non-U.S. Equities posted positive returns for the month of March. The broad international markets, as represented by the MSCI All Country World Ex-US Index, returned 0.6%. SURS portfolio performance exceeded the benchmark for the period, returning 0.8%. Growth stocks outperformed value stocks for the month. Comparative performance of emerging markets has been a positive contributor to relative performance over the trailing three, five, and ten-year periods.

	March 2019	FYTD	1 YR	3 YR	5 YR	10YR
<b>SURS</b>	<b>0.8%</b>	<b>-2.2%</b>	<b>-4.6%</b>	<b>7.9%</b>	<b>3.0%</b>	<b>9.0%</b>
Performance Benchmark	0.6%	-1.6%	-4.2%	8.1%	2.6%	8.8%
MSCI All Country World Ex-US	0.6%	-1.6%	-4.2%	8.1%	2.6%	8.8%
MSCI All Country World Ex-US Growth	1.6%	-1.6%	-3.0%	8.4%	4.0%	9.5%
MSCI All Country World Ex-US Value	-0.4%	-1.6%	-5.4%	7.7%	1.1%	8.2%
MSCI EAFE	0.6%	-2.5%	-3.7%	7.3%	2.3%	9.0%
MSCI EAFE Growth	1.8%	-1.4%	-1.3%	7.6%	3.9%	9.7%
MSCI EAFE Value	-0.5%	-3.6%	-6.1%	6.9%	0.7%	8.1%
MSCI EAFE Small Cap	0.2%	-7.7%	-9.0%	7.9%	4.8%	13.1%
MSCI Emerging Markets	0.8%	0.6%	-7.4%	10.7%	3.7%	8.9%

### Longer-Term Results

The five-year cumulative relative wealth chart, below (left) indicates that SURS Non-U.S. Equity portfolio has exceeded its benchmark return by approximately 2.18%. On a risk-adjusted basis, SURS Non-U.S. Equity portfolio has outpaced its benchmark by 47 basis points, generating a higher return although with slightly less volatility than the benchmark. SURS portfolio has returned 3.01%, while the risk-adjusted benchmark return is 2.54 %.



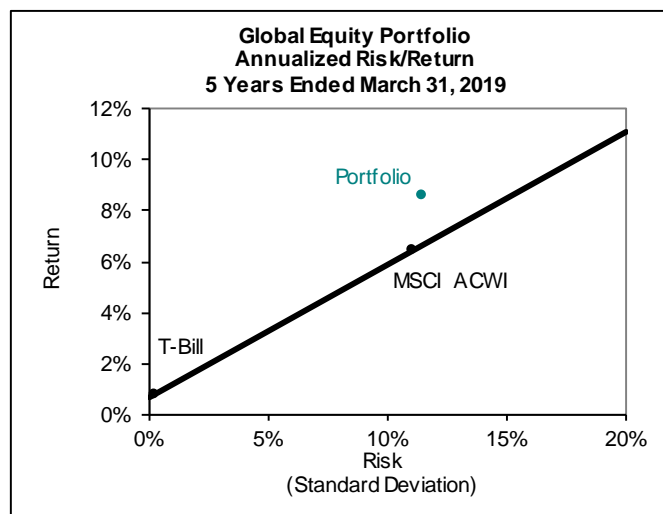
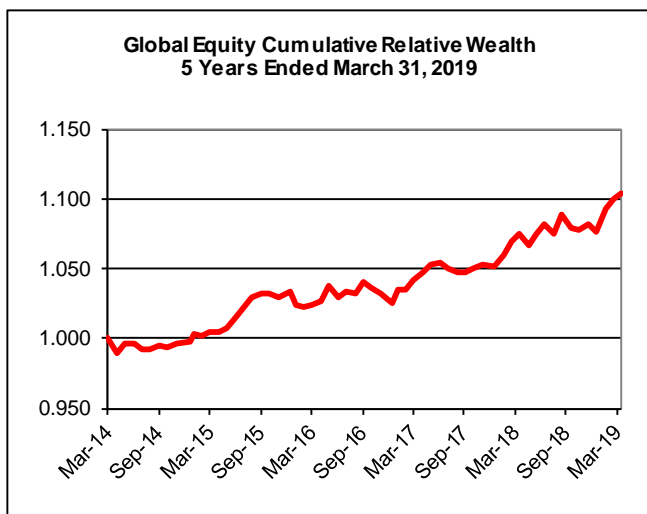
## Global Equities

Global Equities posted positive returns for the month of March. The broad market as measured by the MSCI All Country World Index (ACWI) returned 1.3% during the month. SURS portfolio outperformed the benchmark return during March by 0.4%, returning 1.7%.

	March 2019	FYTD	1 YR	3 YR	5 YR	10 YR
<b>SURS</b>	<b>1.7%</b>	<b>4.2%</b>	<b>5.3%</b>	<b>13.5%</b>	<b>8.6%</b>	<b>13.1%</b>
Performance Benchmark	1.3%	2.1%	2.6%	10.7%	6.5%	12.0%
MSCI All Country World	1.3%	2.1%	2.6%	10.7%	6.5%	12.0%
MSCI World	1.3%	2.2%	4.0%	10.7%	6.8%	12.4%
Dow Jones U.S. Total Stock Mkt	1.4%	4.6%	8.7%	13.5%	10.3%	16.0%
MSCI All Country World Ex-US	0.6%	-1.6%	-4.2%	8.1%	2.6%	8.8%

## Longer-Term Results

The five-year cumulative relative wealth chart, below (left) indicates that SURS Global Equities portfolio has outperformed its benchmark return by approximately 10.39%. The portfolio is generating higher returns than, and with slightly more volatility than, the benchmark. On a risk-adjusted basis, the portfolio outpaced its benchmark by 189 basis points on an annualized basis of 8.58% versus a required return of 6.69%.



## Private Equities

Private Equities posted positive returns for the quarter ended March. The returns from this asset class lag one quarter due to the time frame associated with data collection for both accounting and performance reporting purposes. The one-year return through March 31, 2019 was 12.6% as compared to its benchmark return of -2.3%.

	March 2019	FYTD	1 YR	3 YR	5 YR	10 YR
<b>SURS</b>	<b>0.1%</b>	<b>4.6%</b>	<b>12.6%</b>	<b>12.1%</b>	<b>9.8%</b>	<b>11.1%</b>
Performance Benchmark	-13.6%	-6.8%	-2.3%	11.9%	10.9%	16.2%

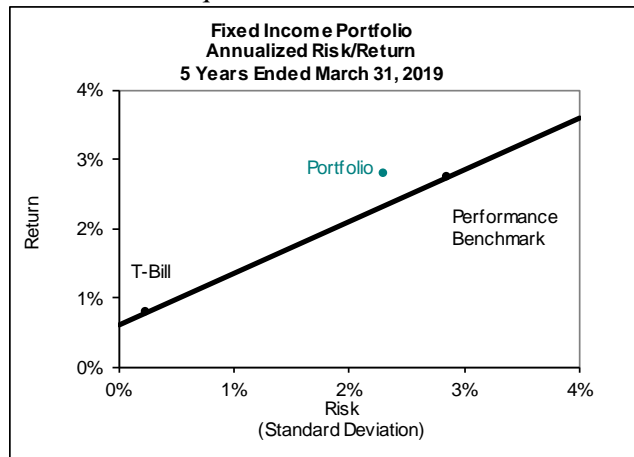
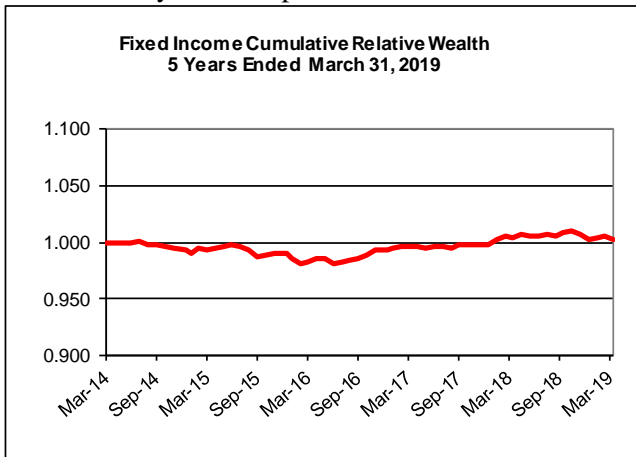
## Fixed Income

The U.S. fixed income markets experienced positive returns for the month of March. The broad market, as measured by the Bloomberg Barclays U.S. Aggregate Index, posted a return of 1.9 for the month. SURS core/core plus/absolute return fixed income portfolio returned 1.6%, underperforming the benchmark return during the month by 0.3%. The long term government sector experienced the strongest performance for the period.

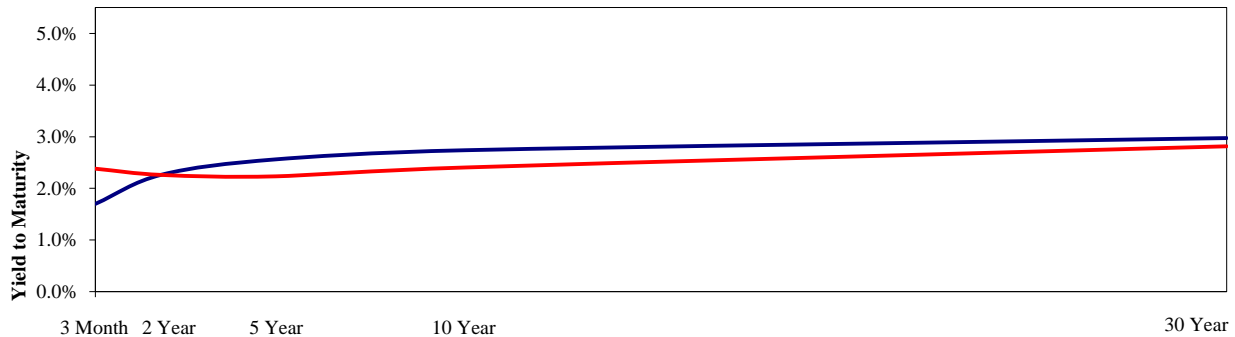
	March 2019	FYTD	1 YR	3 YR	5 YR	10 YR
<b>SURS</b>	<b>1.6%</b>	<b>4.3%</b>	<b>4.3%</b>	<b>2.7%</b>	<b>2.8%</b>	<b>4.8%</b>
Performance Benchmark	1.9%	4.6%	4.5%	2.0%	2.7%	3.8%
Bloomberg Barclays U.S. Aggregate	1.9%	4.6%	4.5%	2.0%	2.7%	3.8%
Bloomberg Barclays Universal	1.8%	4.8%	4.5%	2.6%	3.0%	4.4%
Long Term Government	5.2%	5.9%	6.2%	1.5%	5.4%	5.2%
Intermediate Government	1.2%	3.7%	3.8%	1.0%	1.7%	2.0%
Long Term Corporate	4.3%	7.4%	4.4%	5.3%	5.3%	9.2%
Intermediate Corporate	1.6%	5.3%	5.2%	2.9%	3.0%	5.7%
Mortgage Backed	1.5%	4.2%	4.4%	1.8%	2.6%	3.1%
90-day Treasury Bills	0.2%	1.7%	2.2%	1.3%	0.8%	0.4%
3-month LIBOR	0.2%	1.9%	2.4%	1.5%	1.0%	0.7%

### Longer-Term Results

The five-year cumulative relative wealth chart, below (left) indicates that SURS fixed income portfolio has exceeded its benchmark return by approximately 0.19%. On a risk-adjusted basis, the portfolio is producing a slightly higher return with less volatility than the benchmark. The portfolio has outpaced its risk-adjusted benchmark by 46 basis points on an annualized basis of 2.78% versus a required return of 2.32%.



US Treasury Yield Curve



— 3/30/2018  
— 3/29/2019

Years to Maturity

3/30/2018	1.70%	2.27%	2.56%	2.74%		2.97%
3/29/2019	2.38%	2.26%	2.23%	2.41%		2.81%

## Treasury Inflation-Protected Securities (TIPS)

The TIPS markets experienced positive results during March, returning 1.8% for the month. SURS portfolio performance exceeded the benchmark for the period, returning 1.9%. SURS implemented a passive TIPS strategy in May 2017 to replace the active TIPS strategy in the investment portfolio.

	March 2019	FYTD	1 YR	3 YR	5 YR	10 YR
<b>SURS</b>	<b>1.9%</b>	<b>1.9%</b>	<b>2.7%</b>	<b>1.9%</b>	<b>1.8%</b>	<b>3.9%</b>
Custom Benchmark	1.8%	1.9%	2.7%	1.7%	1.9%	3.4%
Bloomberg Barclays U.S. TIPS Index	1.8%	1.9%	2.7%	1.7%	1.9%	3.4%
Bloomberg Barclays 1-10 year TIPS Index	1.3%	2.1%	2.7%	1.5%	1.5%	2.8%
90-day Treasury Bills	0.2%	1.7%	2.2%	1.3%	0.8%	0.4%

## Emerging Market Debt (EMD)

The emerging market debt markets experienced flat results during March, returning 0.0% for the month. SURS portfolio performance matched the benchmark for the period, also returning 0.0%. For the month, corporate securities and dollar denominated bonds outperformed local currency issues.

	March 2019	FYTD	1 YR	3 YR	5 YR	10 YR
<b>SURS</b>	<b>0.0%</b>	<b>5.2%</b>	<b>-2.6%</b>	<b>5.1%</b>	<b>3.3%</b>	<b>3.3%</b>
Custom Benchmark	0.0%	5.4%	-1.6%	4.7%	3.7%	3.7%
JPM CEMBI Broad	1.4%	6.9%	5.0%	6.0%	5.3%	5.3%
JPM EMBI Global Diversf	1.4%	8.0%	4.2%	5.8%	5.4%	5.4%
JPM GBI-EM Global Diversf	-1.3%	3.2%	-7.6%	3.3%	2.0%	2.0%



## Real Estate

### Real Estate Investment Trust Securities (REITs)

The global REIT markets experienced positive returns in March, returning 3.5%. SURS total REIT portfolio exceeded the index, returning 3.7% for the month.

	March 2019	FYTD	1 YR	3 YR	5 YR	10 YR
<b>SURS</b>	<b>3.7%</b>	<b>8.7%</b>	<b>14.6%</b>	<b>6.1%</b>	<b>7.9%</b>	<b>16.5%</b>
Custom Benchmark	3.5%	7.8%	13.3%	5.7%	7.8%	16.6%
FTSE EPRA /NAREIT Developed Index	3.5%	7.8%	13.3%	5.7%	6.4%	14.0%
FTSE EPRA /NAREIT Developed Ex-U.S	4.0%	6.7%	7.0%	7.1%	5.3%	11.9%

### Direct Real Estate

SURS began funding its direct real estate portfolio in June 2005 and reports performance one quarter in arrears. The one-year return through March 31, 2019 was 7.6% as compared to its benchmark return of 7.4%.

	March 2019	FYTD	1 YR	3 YR	5 YR	10 YR
<b>SURS</b>	<b>1.8%</b>	<b>5.6%</b>	<b>7.6%</b>	<b>7.8%</b>	<b>10.0%</b>	<b>7.8%</b>
<b>SURS Core Real Estate</b>	1.2%	4.7%	6.7%	6.6%	8.7%	6.8%
<b>SURS Non-Core Real Estate</b>	3.1%	7.9%	9.9%	11.2%	13.6%	11.5%
NCREIF ODCE Index	1.5%	3.4%	7.4%	7.3%	9.4%	6.0%
Consumer Price Index	1.2%	0.9%	1.9%	2.2%	1.5%	2.0%

### Hedged Strategies

Hedged strategies became a component of SURS portfolio in March 2016. The asset class experienced positive results during March, returning 1.0% for the month. SURS portfolio performance underperformed the benchmark for the period by 0.2%, returning 0.8%.

	March 2019	FYTD	1 YR	3 YR	5 YR	Since Inception
<b>SURS</b>	<b>0.8%</b>	<b>0.1%</b>	<b>1.4%</b>	<b>3.3%</b>	<b>3.0%</b>	<b>3.0%</b>
Custom Benchmark	1.0%	3.1%	5.1%	5.7%	5.7%	5.7%
HFRI Fund of Funds Composite	0.9%	-0.4%	0.1%	3.9%	4.1%	4.1%
HFRI Fund Weighted Composite	1.0%	0.1%	0.9%	5.1%	5.7%	5.7%

## Commodities

SURS began investing in commodities in May 2016. Commodities experienced negative results during March, returning -0.2% for the month. SURS portfolio outperformed the benchmark for the period by 0.3%, returning 0.1%.

	March 2019	FYTD	1 YR	3 YR	5 YR	Since Inception
<b>SURS</b>	<b>0.1%</b>	<b>-2.2%</b>	<b>-2.2%</b>	<b>2.9%</b>	<b>2.9%</b>	<b>2.9%</b>
Custom Benchmark	-0.2%	-5.6%	-5.3%	-0.5%	-0.5%	-0.5%

## Commodities

**Standard & Poor's Goldman Sachs Commodity Index (blue line)  
and Bloomberg Commodity Index (red line)**



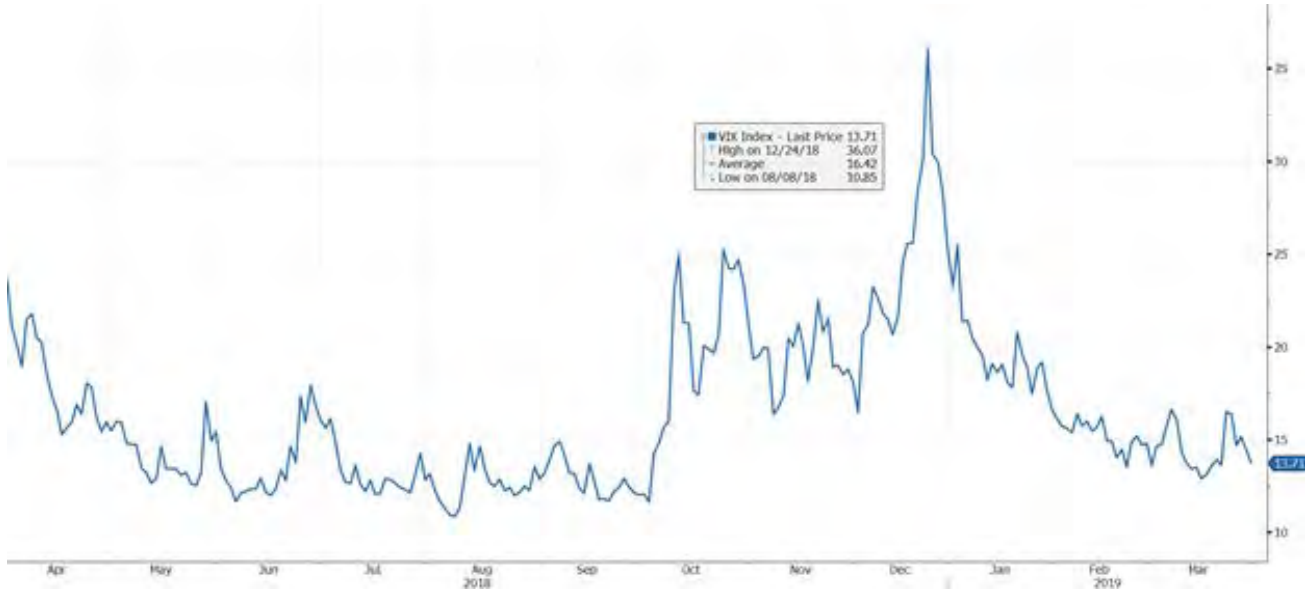
Source: Bloomberg. Calculations are as of the last monthly trading day. All data is as of March 29, 2019.

## Opportunity Fund

The Opportunity Fund currently is comprised of an infrastructure portfolio that reports performance one quarter in arrears. The one-year return through March 31, 2019 was 4.2% versus its benchmark return of 7.1%.

	March 2019	FYTD	1 YR	3 YR	5 YR	10 YR
<b>SURS</b>	<b>0.0%</b>	<b>4.0%</b>	<b>4.2%</b>	<b>3.0%</b>	<b>5.4%</b>	<b>11.9%</b>
Custom Benchmark	0.1%	4.5%	7.1%	7.2%	6.7%	8.8%

## CBOE S&P 500 Volatility Index

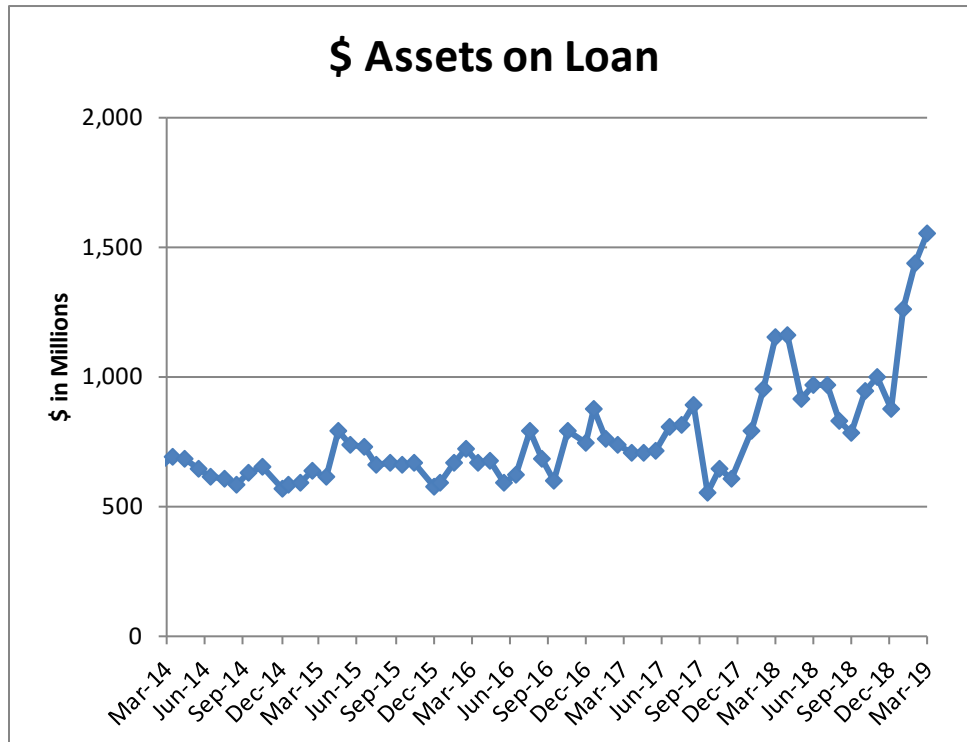


Source: Bloomberg. Calculations are as of the last monthly trading day. All data is as of March 29, 2019.

## Securities Lending

At its April 2012 meeting, SURS Board of Trustees approved a risk-averse securities lending strategy that was implemented in July 2012 with third-party services provider Deutsche Bank. Program statistics for the month of March and the 2019 fiscal year are as listed, below:

Securities Lending Income as of March 31, 2019	
<b>Total for the Month</b>	\$619,550
<b>Fiscal Year to Date</b>	\$3,500,433
<b>Fiscal Year to Date Monthly Average</b>	\$388,937



**Schedule of Self-Managed Plan Investment Allocation  
as of March 31, 2019**

	<u>U.S. Equity</u>	<u>Non-U.S. Equity</u>	<u>Fixed Income</u>	<u>Balanced</u>	<u>Real Estate</u>	<u>Total</u>
<b>Fidelity Investment Options</b>						
<b>Actively Managed</b>						
Fidelity Managed Income Portfolio Class 2			63,737,971			63,737,971
PIMCO Total Return Institutional			44,923,932			44,923,932
Fidelity Puritan Class K				223,245,331		223,245,331
Ariel Fund Institutional	37,803,266					37,803,266
American Beacon Large Cap Value Inst.	13,980,963					13,980,963
Wells Fargo Small Company Growth R6	25,406,247					25,406,247
Fidelity Growth Company Commingled Pool	148,601,393					148,601,393
Fidelity Contrafund Commingled Pool	128,073,779					128,073,779
Fidelity Low-Priced Stock Class K	48,396,379					48,396,379
Fidelity Diversified International Pool		47,495,668				47,495,668
Fidelity Real Estate Investment					22,338,131	22,338,131
<b>Passively Managed</b>						
Fidelity U.S. Bond Index Inst Premium			43,618,857			43,618,857
Fidelity Freedom Index Funds - Inst Premium <sup>(1)</sup>				345,210,035		345,210,035
Fidelity Extended Market Index Inst Premium	51,858,436					51,858,436
Fidelity 500 Index Inst Premium	253,753,203					253,753,203
Fidelity Global ex-U.S. Index Inst Premium		32,951,770				32,951,770
<b>Fidelity Total</b>	<b>707,873,666</b>	<b>80,447,438</b>	<b>152,280,760</b>	<b>568,455,366</b>	<b>22,338,131</b>	<b>1,531,395,360</b> <b>61.5%</b>
<b>TIAA-CREF Investment Options</b>						
<b>Actively Managed</b>						
CREF Money Market Account R3			5,788,519			5,788,519
Vanguard Federal Money Market Fund - Investor <sup>(5)</sup>			14,730,671			14,730,671
TIAA Traditional Annuity			131,141,405			131,141,405
CREF Bond Market Account R3			55,580,589			55,580,589
CREF Inflation-Linked Bond Account R3			27,574,508			27,574,508
CREF Social Choice Account R3				56,547,509		56,547,509
CREF Growth Account R3 <sup>(3)</sup>	607,678					607,678
CREF Stock Account R3	182,455,186					182,455,186
CREF Global Equities Account R3		64,533,423				64,533,423
Dimensional Target Date Ret Inc Fund - Inst <sup>(2)</sup>				5,406,082		5,406,082
TIAA Real Estate Account					22,178,928	22,178,928
<b>Passively Managed</b>						
CREF Equity Index Account R3	99,141,830					99,141,830
TIAA-CREF Large-Cap Growth Index - Inst	143,529,850					143,529,850
TIAA-CREF Lifecycle Index Funds - Inst				149,590,074		149,590,074
<b>TIAA-CREF Total</b>	<b>425,734,544</b>	<b>64,533,423</b>	<b>234,815,693</b>	<b>211,543,665</b>	<b>22,178,928</b>	<b>958,806,252</b> <b>38.5%</b>
<b>GRAND TOTALS</b>	<b><u>\$1,133,608,210</u></b> 45.5%	<b><u>\$144,980,861</u></b> 5.8%	<b><u>\$387,096,453</u></b> 15.5%	<b><u>\$779,999,031</u></b> 31.3%	<b><u>\$44,517,058</u></b> 1.8%	<b><u>\$2,490,201,612</u></b> 100.0%
<b>SMP Forfeiture Reserve <sup>(4)</sup></b>						<b>19,702,551</b>
<b>SMP Disability Reserve <sup>(4)</sup></b>						<b>108,545,787</b>
<b>Total SMP Investments</b>						<b><u>2,618,449,950</u></b>

- As of March 31, 2019, the Fidelity Freedom Index Fund (lifecycle) series is the default fund for members who have selected the Self-Managed Plan but have not yet selected investment provider(s), or who have selected Fidelity but have not selected individual mutual funds/variable annuities/commingled pools.
- As of March 31, 2019, the Dimensional Target Date Retirement Income series is the default fund for members who have selected TIAA but have not yet selected individual mutual funds/variable annuities/commingled pools.
- CREF Growth Account is no longer an approved option for the Self-Managed Plan. Assets remaining in the Account were invested prior to termination of this option.
- These assets are commingled with the SURS defined benefit plan investments and accrue interest equal to the overall annual rate of return of the fund, net of fees. The reserve totals are preliminary and unaudited.

**Self-Managed Plan Performance  
March 31, 2019 Returns**

	Inception Date	Quarter	1 Year	3 Year	5 Year	10 Year	Expense	
							Ratio	
<b>Dimensional 2005 Target Date Retirement Income Fund - Inst</b>	Nov-15		4.6%	2.9%	3.8%	N/A	N/A	0.19%
<i>S&amp;P STRIDE Glide Path 2005 Index Total Return</i>			4.7%	3.5%	3.9%	N/A	N/A	
<b>Dimensional 2010 Target Date Retirement Income Fund - Inst</b>	Nov-15		5.7%	3.1%	4.1%	N/A	N/A	0.20%
<i>S&amp;P STRIDE Glide Path 2010 Index Total Return</i>			6.0%	4.1%	4.4%	N/A	N/A	
<b>Dimensional 2015 Target Date Retirement Income Fund - Inst</b>	Nov-15		6.1%	3.0%	4.2%	N/A	N/A	0.20%
<i>S&amp;P STRIDE Glide Path 2015 Index Total Return</i>			6.4%	4.1%	4.5%	N/A	N/A	
<b>Dimensional 2020 Target Date Retirement Income Fund - Inst</b>	Nov-15		6.8%	2.9%	5.1%	N/A	N/A	0.22%
<i>S&amp;P STRIDE Glide Path 2020 Index Total Return</i>			7.0%	4.0%	5.3%	N/A	N/A	
<b>Dimensional 2025 Target Date Retirement Income Fund - Inst</b>	Nov-15		8.3%	2.8%	6.4%	N/A	N/A	0.23%
<i>S&amp;P STRIDE Glide Path 2025 Index Total Return</i>			8.6%	4.4%	6.8%	N/A	N/A	
<b>Dimensional 2030 Target Date Retirement Income Fund - Inst</b>	Nov-15		9.2%	2.6%	7.6%	N/A	N/A	0.25%
<i>S&amp;P STRIDE Glide Path 2030 Index Total Return</i>			9.6%	4.6%	8.1%	N/A	N/A	
<b>Dimensional 2035 Target Date Retirement Income Fund - Inst</b>	Nov-15		9.8%	2.5%	8.7%	N/A	N/A	0.26%
<i>S&amp;P STRIDE Glide Path 2035 Index Total Return</i>			10.2%	4.4%	9.2%	N/A	N/A	
<b>Dimensional 2040 Target Date Retirement Income Fund - Inst</b>	Nov-15		10.2%	2.2%	9.8%	N/A	N/A	0.27%
<i>S&amp;P STRIDE Glide Path 2040 Index Total Return</i>			10.7%	4.6%	10.5%	N/A	N/A	
<b>Dimensional 2045 Target Date Retirement Income Fund - Inst</b>	Nov-15		11.7%	2.0%	10.6%	N/A	N/A	0.26%
<i>S&amp;P STRIDE Glide Path 2045 Index Total Return</i>			11.9%	4.3%	11.2%	N/A	N/A	
<b>Dimensional 2050 Target Date Retirement Income Fund - Inst</b>	Nov-15		11.8%	2.1%	10.6%	N/A	N/A	0.27%
<i>S&amp;P STRIDE Glide Path 2050 Index Total Return</i>			11.9%	4.3%	11.2%	N/A	N/A	
<b>Dimensional 2055 Target Date Retirement Income Fund - Inst</b>	Nov-15		11.8%	2.0%	10.6%	N/A	N/A	0.27%
<i>S&amp;P STRIDE Glide Path 2055 Index Total Return</i>			11.9%	4.3%	11.2%	N/A	N/A	
<b>Dimensional 2060 Target Date Retirement Income Fund - Inst</b>	Nov-15		11.7%	2.1%	10.7%	N/A	N/A	0.27%
<i>S&amp;P STRIDE Glide Path 2060 Index Total Return</i>			11.9%	4.3%	11.2%	N/A	N/A	
<b>Dimensional Retirement Income Fund - Institutional</b>	Nov-15		4.5%	3.0%	3.5%	N/A	N/A	0.22%
<i>Custom Benchmark <sup>1</sup></i>			3.8%	2.2%	3.3%	N/A	N/A	
<b>Fidelity Freedom Index 2005 Fund - Institutional Premium</b>	Oct-09		5.2%	4.3%	5.2%	4.0%	N/A	0.13%
<i>Custom Benchmark <sup>1</sup></i>			5.2%	4.4%	5.3%	4.1%	N/A	
<b>Fidelity Freedom Index 2010 Fund - Institutional Premium</b>	Oct-09		6.2%	4.5%	6.2%	4.6%	N/A	0.13%
<i>Custom Benchmark <sup>1</sup></i>			6.2%	4.6%	6.2%	4.7%	N/A	
<b>Fidelity Freedom Index 2015 Fund - Institutional Premium</b>	Oct-09		7.3%	4.6%	7.1%	5.2%	N/A	0.13%
<i>Custom Benchmark <sup>1</sup></i>			7.3%	4.7%	7.2%	5.2%	N/A	
<b>Fidelity Freedom Index 2020 Fund - Institutional Premium</b>	Oct-09		8.1%	4.7%	7.7%	5.5%	N/A	0.13%
<i>Custom Benchmark <sup>1</sup></i>			8.1%	4.8%	7.8%	5.6%	N/A	
<b>Fidelity Freedom Index 2025 Fund - Institutional Premium</b>	Oct-09		8.8%	4.7%	8.3%	5.9%	N/A	0.13%
<i>Custom Benchmark <sup>1</sup></i>			8.8%	4.9%	8.4%	6.0%	N/A	
<b>Fidelity Freedom Index 2030 Fund - Institutional Premium</b>	Oct-09		10.0%	4.8%	9.7%	6.7%	N/A	0.14%
<i>Custom Benchmark <sup>1</sup></i>			10.1%	5.0%	9.8%	6.8%	N/A	
<b>Fidelity Freedom Index 2035 Fund - Institutional Premium</b>	Oct-09		11.5%	4.7%	10.8%	7.2%	N/A	0.14%
<i>Custom Benchmark <sup>1</sup></i>			11.5%	4.9%	10.8%	7.3%	N/A	
<b>Fidelity Freedom Index 2040 Fund - Institutional Premium</b>	Oct-09		12.0%	4.6%	10.8%	7.2%	N/A	0.14%
<i>Custom Benchmark <sup>1</sup></i>			12.0%	4.8%	10.9%	7.3%	N/A	
<b>Fidelity Freedom Index 2045 Fund - Institutional Premium</b>	Oct-09		11.9%	4.6%	10.8%	7.2%	N/A	0.14%
<i>Custom Benchmark <sup>1</sup></i>			12.0%	4.8%	10.9%	7.3%	N/A	
<b>Fidelity Freedom Index 2050 Fund - Institutional Premium</b>	Oct-09		11.9%	4.6%	10.8%	7.2%	N/A	0.14%
<i>Custom Benchmark <sup>1</sup></i>			12.0%	4.8%	10.9%	7.3%	N/A	
<b>Fidelity Freedom Index 2055 Fund - Institutional Premium</b>	Jun-11		11.9%	4.6%	10.8%	7.2%	N/A	0.14%
<i>Custom Benchmark <sup>1</sup></i>			12.0%	4.8%	10.9%	7.3%	N/A	
<b>Fidelity Freedom Index 2060 Fund - Institutional Premium</b>	Aug-14		12.0%	4.7%	10.8%	N/A	N/A	0.14%
<i>Custom Benchmark <sup>1</sup></i>			12.0%	4.8%	10.9%	N/A	N/A	
<b>Fidelity Freedom Index Income Fund - Institutional Premium</b>	Oct-09		4.3%	4.2%	4.1%	3.2%	N/A	0.12%
<i>Custom Benchmark <sup>1</sup></i>			4.3%	4.3%	4.2%	3.3%	N/A	

Lifecycle Funds



## Self-Managed Plan Performance March 31, 2019 Returns

	Inception Date	Quarter	1 Year	3 Year	5 Year	10 Year	Expense	
							Ratio	
Lifecycle Funds	TIAA-CREF Lifecycle Index 2010 Fund - Institutional	Sep-09	6.8%	4.5%	6.2%	4.9%	N/A	0.10%
	<i>Custom Benchmark</i> <sup>1</sup>		6.8%	4.5%	6.3%	5.0%	N/A	
	TIAA-CREF Lifecycle Index 2015 Fund - Institutional	Sep-09	7.3%	4.6%	6.7%	5.3%	N/A	0.10%
	<i>Custom Benchmark</i> <sup>1</sup>		7.3%	4.6%	6.8%	5.3%	N/A	
	TIAA-CREF Lifecycle Index 2020 Fund - Institutional	Sep-09	7.9%	4.6%	7.4%	5.7%	N/A	0.10%
	<i>Custom Benchmark</i> <sup>1</sup>		8.0%	4.7%	7.5%	5.7%	N/A	
	TIAA-CREF Lifecycle Index 2025 Fund - Institutional	Sep-09	8.7%	4.7%	8.3%	6.1%	N/A	0.10%
	<i>Custom Benchmark</i> <sup>1</sup>		8.8%	4.8%	8.3%	6.2%	N/A	
	TIAA-CREF Lifecycle Index 2030 Fund - Institutional	Sep-09	9.6%	4.8%	9.1%	6.6%	N/A	0.10%
	<i>Custom Benchmark</i> <sup>1</sup>		9.6%	4.8%	9.1%	6.7%	N/A	
	TIAA-CREF Lifecycle Index 2035 Fund - Institutional	Sep-09	10.5%	4.8%	9.9%	7.0%	N/A	0.10%
	<i>Custom Benchmark</i> <sup>1</sup>		10.5%	4.8%	9.9%	7.1%	N/A	
	TIAA-CREF Lifecycle Index 2040 Fund - Institutional	Sep-09	11.2%	4.7%	10.7%	7.4%	N/A	0.10%
	<i>Custom Benchmark</i> <sup>1</sup>		11.3%	4.8%	10.7%	7.5%	N/A	
	TIAA-CREF Lifecycle Index 2045 Fund - Institutional	Sep-09	11.8%	4.6%	11.0%	7.6%	N/A	0.10%
	<i>Custom Benchmark</i> <sup>1</sup>		11.9%	4.7%	11.0%	7.7%	N/A	
	TIAA-CREF Lifecycle Index 2050 Fund - Institutional	Sep-09	11.9%	4.6%	11.1%	7.7%	N/A	0.10%
	<i>Custom Benchmark</i> <sup>1</sup>		12.0%	4.7%	11.2%	7.7%	N/A	
	TIAA-CREF Lifecycle Index 2055 Fund - Institutional	Apr-11	12.1%	4.6%	11.3%	7.8%	N/A	0.10%
	<i>Custom Benchmark</i> <sup>1</sup>		12.1%	4.7%	11.3%	7.8%	N/A	
TIAA-CREF Lifecycle Index 2060 Fund - Institutional	Sep-14	12.2%	4.6%	11.4%	N/A	N/A	0.10%	
<i>Custom Benchmark</i> <sup>1</sup>		12.2%	4.7%	11.4%	N/A	N/A		
TIAA-CREF Lifecycle Index Retirement Inc Fund - Institutional	Sep-09	6.6%	4.5%	5.9%	4.8%	N/A	0.10%	
<i>Custom Benchmark</i> <sup>1</sup>		6.6%	4.5%	5.9%	4.8%	N/A		



## Self-Managed Plan Performance March 31, 2019 Returns

		Inception Date	Quarter	1 Year	3 Year	5 Year	10 Year	Expense	
								Ratio	
Fixed Rate Funds	CREF Money Market Account R3	Apr-88		0.5%	1.8%	0.9%	0.5%	0.3%	0.24%
	Vanguard Federal Money Market Fund - Investor	Jul-81		0.6%	2.0%	1.1%	0.7%	0.4%	0.11%
	iMoneyNet Money Fund Average			0.6%	2.2%	1.3%	0.9%	0.5%	
	Fidelity Managed Income Portfolio Class 2	Sep-89		0.5%	1.9%	1.6%	1.5%	1.4%	0.54%
	TIAA Traditional Annuity	Jan-18		1.0%	4.1%	4.2%	4.3%	4.3%	N/A
	Custom/Citigroup 3 Month Treasury Bill <sup>7</sup>			0.6%	2.1%	1.2%	0.7%	1.1%	
Bond Funds	CREF Bond Market Account R3	Mar-90		3.3%	4.5%	2.5%	2.9%	4.0%	0.31%
	Fidelity U.S. Bond Index Fund - Institutional Class	Mar-90		2.9%	4.6%	2.0%	2.7%	3.7%	0.03%
	PIMCO Total Return Institutional Fund <sup>3</sup>	May-87		2.8%	3.8%	2.8%	2.9%	4.8%	0.55%
	Bloomberg Barclays Aggregate Bond Index			2.9%	4.5%	2.0%	2.7%	3.8%	
	CREF Inflation-Linked Bond Account R3	May-97		2.6%	2.6%	1.4%	1.6%	3.0%	0.24%
	Bloomberg Barclays U.S. Treasury Inflation Notes Index			3.2%	2.7%	1.7%	1.9%	3.4%	
Real Estate	Fidelity Real Estate Investment Portfolio	Nov-86		15.7%	19.4%	5.5%	9.5%	19.5%	0.76%
	Dow Jones U.S. Select Real Estate Securities Index			15.7%	19.7%	5.3%	8.9%	18.5%	
	TIAA REA reported one quarter in arrears, December 31, 2018:								
	TIAA Real Estate Account <sup>4</sup>	Oct-95		1.0%	4.8%	4.8%	6.9%	5.6%	0.79%
	TIAA REA adjusted total return <sup>5</sup>			1.1%	5.6%	5.8%	8.4%	6.2%	
	NCREIF Fund Index - ODCE <sup>6</sup>			1.4%	7.3%	7.5%	9.6%	5.9%	
Balanced Funds	CREF Social Choice Account R3	Mar-90		8.7%	4.8%	7.9%	5.9%	10.1%	0.27%
	Custom Benchmark <sup>1</sup>			8.9%	5.2%	7.9%	6.2%	10.4%	
	Fidelity Puritan Fund - Class K	Apr-47		9.7%	5.5%	9.8%	7.7%	12.0%	0.45%
	Custom Benchmark <sup>1</sup>			9.3%	7.8%	8.9%	7.7%	11.1%	
U.S. Equity Funds	CREF Stock Account R3	Aug-52		13.2%	2.7%	11.3%	7.5%	13.5%	0.31%
	Custom Benchmark <sup>1</sup>			12.9%	4.7%	12.0%	8.2%	13.9%	
	Fidelity Contrafund Commingled Pool	Jan-14		14.9%	9.3%	16.3%	12.4%	N/A	0.43%
	Dow Jones U.S. Total Stock Market Index			14.0%	8.7%	13.5%	N/A	N/A	
	CREF Equity Index Account R3	Apr-94		14.0%	8.6%	13.2%	10.1%	15.6%	0.23%
	Russell 3000 Stock Index			14.0%	8.8%	13.5%	10.4%	16.0%	
	Fidelity Low-Priced Stock Fund - Class K	Dec-89		10.5%	-0.3%	8.7%	6.4%	15.0%	0.53%
	Russell 2000 Value Stock Index			11.9%	0.2%	10.9%	5.6%	14.1%	
	CREF Growth Account R3 <sup>2</sup>	Apr-94		16.9%	11.6%	16.3%	13.3%	17.1%	0.26%
	TIAA-CREF Large-Cap Growth Index Fund Institutional	Oct-02		16.1%	12.7%	16.5%	13.4%	17.4%	0.05%
	Russell 1000 Growth Stock Index			16.1%	12.7%	16.5%	13.5%	17.5%	
	Fidelity Growth Company Commingled Pool	Dec-13		19.8%	9.0%	21.2%	15.3%	N/A	0.43%
	Russell 3000 Growth Index			16.2%	12.1%	16.4%	13.1%	N/A	
	American Beacon Large Cap Value Fund Institutional <sup>3</sup>	Jul-87		13.5%	2.8%	11.0%	6.5%	14.1%	0.62%
	Russell 1000 Value Index			11.9%	5.7%	10.5%	7.7%	14.5%	
	Ariel Fund Institutional <sup>3</sup>	Nov-86		17.7%	1.0%	11.2%	8.2%	18.8%	0.72%
	Russell Midcap Value Index			14.4%	2.9%	9.5%	7.2%	16.4%	
	Wells Fargo Small Company Growth Fund R6 <sup>3</sup>	Nov-94		15.3%	6.2%	15.5%	8.0%	17.5%	0.90%
	Russell 2000 Growth Index			17.1%	3.9%	14.9%	8.4%	16.5%	
	Fidelity Extended Market Index Fund - Premium Class	Nov-97		16.0%	5.0%	13.3%	7.9%	16.5%	0.04%
Dow Jones U.S. Completion Total Stock Mkt Index			16.0%	4.8%	13.1%	7.7%	16.4%		
Fidelity 500 Index Fund - Institutional Premium Class	Feb-88		13.7%	9.5%	13.5%	10.9%	15.9%	0.01%	
S&P 500 Index			13.6%	9.5%	13.5%	10.9%	15.9%		
International/ World Equity Funds	CREF Global Equities Account R3	May-92		13.5%	0.2%	10.0%	6.1%	12.2%	0.34%
	MSCI World Index			12.5%	4.0%	10.7%	6.8%	12.4%	
	Fidelity Diversified International Commingled Pool	Dec-91		11.2%	-4.1%	6.0%	3.4%	N/A	0.58%
	MSCI EAFE Index			10.0%	-3.7%	7.3%	2.3%	N/A	
	Fidelity Global ex U.S. Index Fund - Institutional Class	Sep-11		10.2%	-4.6%	8.2%	2.6%	N/A	0.06%
	MSCI ACWI ex-U.S. Index			10.3%	-4.2%	8.1%	2.6%	N/A	



## Self-Managed Plan Performance March 31, 2019 Returns

**GENERAL NOTES:**

A. The total returns shown represent past performance and are not intended to portray future returns. Total returns and the principal value of investments in the accounts will fluctuate; therefore, upon redemption, your account value may be worth more or less than its original amount. Investment results are after all investment, administrative, and distribution expenses have been deducted. Funds invested are neither insured nor guaranteed by the U.S. Government.

B. Benchmark indices do not take into account any fees or expenses of the individual securities that they track, and individuals cannot invest directly in any index.

**FOOTNOTES:**

1. Custom Benchmarks are a composite blended return of market indices in the same proportion as the fund's current investment strategy. The table below displays the custom benchmark composition used to evaluate the respective SMP fund. A detailed explanation of custom benchmarks is available under SMP on the SURS website at [www.surs.org](http://www.surs.org).
2. The CREF Growth Account is no longer an approved investment option for the SMP. The account was closed to new investors and contributions on July 30, 2004.
3. This fund is available to SMP participants through Fidelity Investments.
4. Total return performance for the REA is based on actual changes in unit values as reported to participants in the REA's historical financial statements.
5. The components of the REA's financial statements upon which the Adjusted Total Return is derived excludes the cash and associated expenses with the liquidity guarantee of the REA because the constituents of the ODCE do not have this unique product feature.
6. The returns are calculated by the National Council of Real Estate Investment Fiduciaries, net of fees.
7. EK&A Guaranteed Investment Contract Index is no longer available and was replaced with the Citigroup 3 Month Treasury Bill Index as of January 1, 2011.

Fund Name	Benchmark Composition
Fidelity Puritan Fund - Class K	60% Russell 3000 Value to July 1, 2008 and S&P 500 as of July 1, 2008; 40% Bloomberg Barclays Aggregate Bond Index
CREF Inflation-Linked Bond Account R3	Citigroup Inflation-Linked Securities Index through September 30, 2003, Bloomberg Barclays U.S. Treasury Inflation Notes Index since October 1, 2003
CREF Social Choice Account R3	60% Dow Jones U.S. Total Stock Market Index, 40% Bloomberg Barclays Aggregate Bond Index through December 31, 2012; 47% Russell 3000 Stock Index, 13% MSCI EAFE + Canada Index, 40% Bloomberg Barclays Aggregate Bond Index from January 1, 2013 through December 31, 2015; 42% Russell 3000 Stock Index, 18% MSCI EAFE + Canada Index, 40% Bloomberg Barclays Aggregate Bond Index since January 1, 2016.
CREF Stock Account R3	80% Dow Jones U.S. Total Stock Market Index, 20% MSCI EAFE + Canada Index through June 30, 2011; 69% Russell 3000 Stock Index, 25% MSCI EAFE + Canada Index, 6% MSCI Emerging Markets Index from July 1, 2011, through December 31, 2012; 70% Russell 3000 Stock Index, 30% MSCI ACWI ex-U.S. Investable Market Index since January 1, 2013
CREF Growth Account R3	Russell 3000 Growth through September 30, 2002, Russell 1000 Growth since October 1, 2002
TIAA-CREF Large Cap Growth Index Fund - Institutional	Russell 3000 Growth through September 30, 2002, Russell 1000 Growth since October 1, 2002
Dimensional Retirement Income Fund - Institutional	20% S&P Global Broad Market Index, 80% S&P 1-5 Year U.S. Treasury TIPS Index
Fidelity Freedom Index Funds - Institutional Premium, TIAA-CREF Lifecycle Index Funds - Institutional	Weighted benchmark of equity and fixed income indices based upon the asset allocation history of each fund. The asset allocation of each fund will become more conservative over time as the fund's target date approaches.



**SURS Private Equity Program Returns**  
**Investment Values for Month Ended March 31, 2019**  
**Investment Performance for Quarter Ended March 31, 2019 <sup>(1)</sup>**

Manager	Incep	Benchmark	Assets (\$mil)	Quarter Mgr	Quarter Bmark	FYTD Mgr	FYTD Bmark	1 YR Mgr	1 YR Bmark	3 YR Mgr	3 YR Bmark	5 YR <sup>(2)</sup> Mgr	5 YR <sup>(2)</sup> Bmark	10 YR <sup>(2)</sup> Mgr	10 YR <sup>(2)</sup> Bmark	Incep <sup>(2)</sup> Mgr	Incep <sup>(2)</sup> Bmark
Adams Street Venture Partnerships (SEP)	Jan-91	DJ US Ttl Stk Mkt + 3%	29	-7.53%	-13.61%	-4.35%	-6.77%	4.49%	-2.30%	9.35%	11.92%	6.24%	10.86%	11.59%	16.22%	28.16%	12.93%
Adams Street 2018 Global Fund (FOF)	Jun-18	MSCI ACWI + 3%	11	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Adams Street 2017 Global Fund (FOF)	Aug-17	DJ US Ttl Stk Mkt + 3%	29	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Adams Street 2016 Global Fund (FOF)	Dec-16	DJ US Ttl Stk Mkt + 3%	72	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Adams Street 2015 Global Fund (FOF)	Jun-15	DJ US Ttl Stk Mkt + 3%	91	1.78%	-13.61%	9.49%	-6.77%	20.34%	-2.30%	28.23%	11.92%	30.14%	10.15%	30.14%	10.15%	30.14%	10.15%
Adams Street 2014 Global Fund (FOF)	May-14	DJ US Ttl Stk Mkt + 3%	94	1.68%	-13.61%	9.19%	-6.77%	19.87%	-2.30%	15.49%	11.92%	14.00%	10.97%	14.00%	10.97%	14.00%	10.97%
Adams Street 2013 Global Fund (FOF)	Mar-13	DJ US Ttl Stk Mkt + 3%	98	1.75%	-13.61%	8.26%	-6.77%	18.42%	-2.30%	14.72%	11.92%	12.50%	10.86%	12.42%	13.84%	12.42%	13.84%
Adams Street 2012 Global Fund (FOF)	Apr-12	DJ US Ttl Stk Mkt + 3%	77	1.83%	-13.61%	6.49%	-6.77%	16.30%	-2.30%	13.23%	11.92%	11.91%	10.86%	11.45%	13.88%	11.45%	13.88%
Adams Street 2009 Global Offering (FOF)	Jan-09	DJ US Ttl Stk Mkt + 3%	96	0.58%	-13.61%	3.85%	-6.77%	12.46%	-2.30%	12.81%	11.92%	13.03%	10.86%	13.05%	16.22%	13.05%	16.22%
Adams Street 2008 Global Offering (FOF)	Jan-08	DJ US Ttl Stk Mkt + 3%	86	-1.45%	-13.61%	3.74%	-6.77%	13.08%	-2.30%	13.23%	11.92%	14.87%	10.86%	14.91%	16.22%	13.83%	10.31%
Adams Street Global Opportunities Secondary Fund - 2004 (FOF)	Mar-04	DJ US Ttl Stk Mkt + 3%	5	-2.06%	-13.61%	1.44%	-6.77%	18.02%	-2.30%	15.47%	11.92%	11.73%	10.86%	11.30%	16.22%	11.43%	10.85%
Adams Street 2007 Global Opportunities Portfolio (FOF)	Jun-07	DJ US Ttl Stk Mkt + 3%	38	-3.53%	-13.61%	-0.50%	-6.77%	2.50%	-2.30%	6.17%	11.92%	5.86%	10.86%	11.16%	16.22%	8.13%	9.61%
Adams Street Global Secondary Fund 5 - 2012 (FOF)	Oct-12	DJ US Ttl Stk Mkt + 3%	14	0.25%	-13.61%	1.57%	-6.77%	6.15%	-2.30%	11.43%	11.92%	6.21%	10.86%	6.51%	14.30%	6.51%	14.30%
Adams Street 2004 Non-U.S. Fund (FOF)	Jul-98	DJ US Ttl Stk Mkt + 3%	8	-0.39%	-13.61%	-0.98%	-6.77%	0.20%	-2.30%	4.51%	11.92%	2.67%	10.86%	8.16%	16.22%	11.68%	9.26%
<b>Total Adams Street Partners</b>	<b>Jan-91</b>		<b>748</b>														
Lincoln Fund I (FOF)	Apr-14	DJ US Ttl Stk Mkt + 3%	57	1.73%	-13.61%	5.00%	-6.77%	13.15%	-2.30%	11.25%	11.92%	9.24%	10.84%	9.24%	10.84%	9.24%	10.84%
<b>Total Fairview Capital Partners</b>	<b>Apr-14</b>		<b>57</b>														
Mesirow Financial Private Equity Fund VII-B	Jan-18	DJ US Ttl Stk Mkt + 3%	20	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Mesirow Financial Private Special Fund B (FOO)	Apr-18	DJ US Ttl Stk Mkt + 3%	14	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
<b>Total Mesirow Private Equity</b>	<b>Jan-18</b>		<b>34</b>														
Emerging Private Equity Fund of 1	Jan-17	DJ US Ttl Stk Mkt + 3%	51	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
M <sup>2</sup> Private Equity Fund of Funds (FOF)	Mar-08	DJ US Ttl Stk Mkt + 3%	7	-0.35%	-13.61%	-2.14%	-6.77%	-0.16%	-2.30%	5.24%	11.92%	11.47%	10.86%	11.06%	16.22%	8.92%	11.36%
<b>Total Muller and Monroe</b>	<b>Dec-04</b>		<b>58</b>														
Pantheon Ventures, Inc. (SEP)	Mar-02	DJ US Ttl Stk Mkt + 3%	72	-1.95%	-13.61%	-1.49%	-6.77%	0.44%	-2.30%	5.28%	11.92%	5.57%	10.86%	10.04%	16.22%	10.46%	10.59%
Pantheon Europe Fund III - 2003 (FOF)	Jan-03	DJ US Ttl Stk Mkt + 3%	9	-32.80%	-13.61%	9.17%	-6.77%	5.84%	-2.30%	6.95%	11.92%	2.66%	10.86%	11.82%	16.22%	14.54%	12.36%
Pantheon Europe Fund VI - 2008 (FOF)	Sep-08	DJ US Ttl Stk Mkt + 3%	25	-1.09%	-13.61%	3.00%	-6.77%	12.81%	-2.30%	15.00%	11.92%	10.30%	10.86%	10.24%	16.22%	9.39%	11.94%
Pantheon Europe Fund VII - 2013 (FOF)	Jan-13	DJ US Ttl Stk Mkt + 3%	32	-0.51%	-13.61%	0.78%	-6.77%	9.67%	-2.30%	45.00%	11.92%	10.24%	10.86%	10.56%	14.76%	10.56%	14.76%
Pantheon Global Secondary Fund II - 2004 (FOF)	Mar-04	DJ US Ttl Stk Mkt + 3%	3	-3.91%	-13.61%	-3.58%	-6.77%	-24.72%	-2.30%	15.80%	11.92%	-1.47%	10.86%	-0.25%	16.22%	3.60%	10.85%
Pantheon Multi-Strategy Program 2014 (US), L.P.	Feb-15	DJ US Ttl Stk Mkt + 3%	66	0.06%	-13.61%	3.03%	-6.77%	15.49%	-2.30%	12.70%	11.92%	11.12%	10.66%	11.12%	10.66%	11.12%	10.66%
Pantheon Access (US) 2017	Nov-17	DJ US Ttl Stk Mkt + 3%	11	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Pantheon Access (US) 2018	Mar-19	DJ US Ttl Stk Mkt + 3%	8	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Pantheon USA Fund VIII - 2008 (FOF)	Jan-08	DJ US Ttl Stk Mkt + 3%	90	-1.53%	-13.61%	2.35%	-6.77%	13.28%	-2.30%	15.11%	11.92%	13.56%	10.86%	13.09%	16.22%	12.35%	10.31%
Pantheon USA Fund IX - 2013 (FOF)	Jan-13	DJ US Ttl Stk Mkt + 3%	91	3.72%	-13.61%	8.82%	-6.77%	19.71%	-2.30%	16.32%	11.92%	14.29%	10.86%	14.27%	14.76%	14.27%	14.76%
<b>Total Pantheon Ventures, Inc.</b>	<b>Mar-02</b>		<b>407</b>														
<b>Total Private Equities</b>	<b>Jan-91</b>	<b>DJ US Ttl Stk Mkt + 3%</b>	<b>1,306</b>	<b>0.05%</b>	<b>-13.61%</b>	<b>4.57%</b>	<b>-6.77%</b>	<b>12.62%</b>	<b>-2.30%</b>	<b>12.09%</b>	<b>11.92%</b>	<b>9.82%</b>	<b>10.86%</b>	<b>11.13%</b>	<b>16.22%</b>	<b>20.28%</b>	<b>12.93%</b>

(1) reports quarterly in arrears  
(2) or since inception, whichever is less  
(FOF) fund of funds

**Progress Investment Manager of Managers Program  
Investment Performance for Month Ended March 31, 2019**

Manager	Incep <sup>(1)</sup>	Benchmark	Assets (\$mil)	% Fund	Month Mgr	Month Bmark	FYTD Mgr	FYTD Bmark	1 YR <sup>(2)</sup> Mgr	1 YR <sup>(2)</sup> Bmark	3 YR <sup>(2)</sup> Mgr	3 YR <sup>(2)</sup> Bmark	5 YR <sup>(2)</sup> Mgr	5 YR <sup>(2)</sup> Bmark	Incep <sup>(2)</sup> Mgr	Incep <sup>(2)</sup> Bmark
<b>PROGRESS TOTAL FUND</b>	<b>May-08</b>		508	100.0%	1.5%		2.3%		1.0%		5.5%		3.4%		5.4%	
<b>Non-U.S. Equity</b>																
Arga Investment Management	Sep-16	MSCI EAFE	36	7.1%	1.4%	0.6%	0.1%	-2.5%	-1.9%	-3.7%	7.7%	6.7%	7.7%	6.7%	7.7%	6.7%
Brown Capital Management	May-08	MSCI EAFE	36	7.0%	2.0%	0.6%	-1.9%	-2.5%	-0.4%	-3.7%	6.1%	7.3%	3.7%	2.3%	4.8%	1.7%
Denali	Apr-17	MSCI EAFE	25	5.0%	-0.3%	0.6%	-0.6%	-2.5%	-4.2%	-3.7%	5.1%	4.0%	5.1%	4.0%	5.1%	4.0%
Rondure	Mar-19	MSCI EAFE	39	7.8%	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Solstein Capital	Oct-17	MSCI EAFE	43	8.5%	2.8%	0.6%	-0.9%	-2.5%	-1.0%	-3.7%	1.9%	-1.9%	1.9%	-1.9%	1.9%	-1.9%
Strategic Global Advisors	May-08	MSCI EAFE	41	8.0%	-0.1%	0.6%	-1.5%	-2.5%	-3.9%	-3.7%	8.3%	7.3%	5.1%	2.3%	4.8%	1.7%
<b>TOTAL NON-U.S. EQUITY</b>	<b>May-08</b>	<b>MSCI EAFE</b>	<b>220</b>	<b>43.3%</b>	<b>1.3%</b>	<b>0.6%</b>	<b>-1.5%</b>	<b>-2.5%</b>	<b>-2.7%</b>	<b>-3.7%</b>	<b>8.3%</b>	<b>7.3%</b>	<b>2.9%</b>	<b>2.3%</b>	<b>3.0%</b>	<b>1.7%</b>
<b>Core Fixed Income</b>																
GIA Partners	Jul-14	Bloomberg Barclays U.S. Aggr	39	7.7%	1.8%	1.9%	4.5%	4.6%	3.8%	4.5%	3.0%	2.0%	2.8%	2.5%	2.8%	2.5%
Integrity Fixed Income	Oct-17	Bloomberg Barclays U.S. Aggr	29	5.7%	2.0%	1.9%	4.5%	4.6%	4.2%	4.5%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%
New Century Advisors	May-08	Bloomberg Barclays U.S. Aggr	46	9.0%	1.9%	1.9%	4.5%	4.6%	4.2%	4.5%	2.2%	2.0%	2.5%	2.7%	4.0%	3.8%
Ramirez Asset Management	May-13	Bloomberg Barclays U.S. Aggr	39	7.7%	2.0%	1.9%	4.7%	4.6%	4.5%	4.5%	2.8%	2.0%	3.1%	2.7%	2.8%	2.5%
<b>TOTAL Core Fixed Income</b>	<b>May-08</b>	<b>Bloomberg Barclays U.S. Aggr</b>	<b>153</b>	<b>30.1%</b>	<b>1.9%</b>	<b>1.9%</b>	<b>4.4%</b>	<b>4.6%</b>	<b>4.0%</b>	<b>4.5%</b>	<b>2.4%</b>	<b>2.0%</b>	<b>2.8%</b>	<b>2.7%</b>	<b>4.1%</b>	<b>3.8%</b>
<b>Emerging Market Debt</b>																
GIA Partners	Apr-15	JPM CEMBI Broad	80	15.7%	1.3%	1.4%	6.9%	6.9%	3.7%	5.0%	7.0%	6.0%	5.1%	4.9%	5.1%	4.9%
LM Capital Group	Apr-15	JPM CEMBI Broad	55	10.9%	1.4%	1.4%	6.2%	6.9%	4.2%	5.0%	6.1%	6.0%	4.5%	4.9%	4.5%	4.9%
<b>TOTAL Emerging Market Debt</b>	<b>Apr-15</b>	<b>JPM CEMBI Broad</b>	<b>135</b>	<b>26.6%</b>	<b>1.4%</b>	<b>1.4%</b>	<b>6.6%</b>	<b>6.9%</b>	<b>3.9%</b>	<b>5.0%</b>	<b>6.5%</b>	<b>6.0%</b>	<b>4.7%</b>	<b>4.9%</b>	<b>4.7%</b>	<b>4.9%</b>

(1) inception date of account or (2) since inception, whichever is less

**SURS Manager Diversity Program Returns**  
**Investment Performance for Month Ended March 31, 2019**

Manager	Incep	Benchmark	Assets (\$mil)	Month Mgr	Month Bmark	Quarter Mgr	Quarter Bmark	FYTD Mgr	FYTD Bmark	1 YR Mgr	1YR Bmark	3 YR Mgr	3 YR Bmark	5 YR Mgr	5 YR Bmark	Incep Mgr	Incep Bmark
<b>TOTAL MDP</b>	Jan-05	Policy Portfolio	3,498	1.0%	0.8%	9.3%	8.8%	0.7%	1.9%	1.7%	3.2%	7.3%	7.9%	5.4%	5.3%	6.0%	6.0%
<b>U.S. Equity: Active</b>																	
Matarin Capital	Jan-18	Russell 2000	92	-3.6%	-2.1%	11.0%	14.6%	-10.7%	-5.3%	-4.5%	2.0%	-6.5%	-0.5%	-6.5%	-0.5%	-6.5%	-0.5%
Channing SMID Value	Jan-18	Russell 2500 Value	90	-1.8%	-1.3%	14.8%	13.1%	-6.9%	-3.7%	-5.3%	1.8%	-8.1%	-1.8%	-8.1%	-1.8%	-8.1%	-1.8%
EARNEST Partners	Jun-11	Russell Midcap	166	1.6%	0.9%	19.2%	16.5%	4.5%	3.6%	6.4%	6.5%	15.0%	11.8%	10.4%	8.8%	12.0%	11.2%
Denali Advisors	Dec-17	Russell 1000 Value	49	0.5%	0.6%	10.8%	11.9%	0.0%	4.4%	-0.6%	5.7%	-2.8%	2.1%	-2.8%	2.1%	-2.8%	2.1%
Gladius - US Equity	Dec-16	Russell 3000	442	1.6%	1.5%	11.9%	14.0%	0.1%	4.7%	5.0%	8.8%	10.5%	12.7%	10.5%	12.7%	10.5%	12.7%
Piedmont Investment Advisors	Jul-14	S&P 500	673	1.3%	1.9%	13.7%	13.6%	4.6%	5.9%	7.0%	9.5%	14.2%	13.5%	11.0%	10.3%	11.0%	10.3%
<b>Composite, Active U.S. Equity</b>	Apr-05	Blended	1,511	0.9%	1.1%	13.5%	13.1%	1.3%	3.6%	4.5%	7.5%	12.1%	12.9%	8.8%	8.8%	9.1%	9.0%
<b>TOTAL U.S. Equity</b>	Jan-05	Blended	1,511	0.9%	1.1%	13.5%	13.1%	1.3%	3.6%	4.5%	7.5%	12.1%	12.9%	8.8%	8.8%	8.6%	8.7%
<b>Non-U.S. Equity</b>																	
Ativo Capital Management	Jul-08	MSCI ACWI Ex-U.S.	284	2.0%	0.6%	11.0%	10.3%	-0.5%	-1.6%	-1.7%	-4.2%	5.4%	8.1%	2.8%	2.6%	3.8%	2.6%
GlobeFlex Capital	Jul-14	MSCI ACWI Ex-U.S.	305	0.2%	0.6%	10.0%	10.3%	-7.1%	-1.6%	-9.9%	-4.2%	6.9%	8.1%	2.2%	1.6%	2.2%	1.6%
Strategic Global Advisors	Aug-08	MSCI EAFE	325	0.3%	0.6%	10.9%	10.0%	-2.6%	-2.5%	-3.6%	-3.7%	6.5%	7.3%	4.1%	2.3%	5.9%	3.2%
<b>TOTAL Non-U.S. Equity</b>	Aug-06	Blended	914	0.8%	0.6%	10.6%	10.2%	-3.5%	-2.0%	-5.2%	-4.0%	6.3%	7.8%	3.0%	2.5%	3.8%	2.7%
<b>Private Equity</b>																	
Fairview Lincoln Fund I	Apr-14	DJ U.S. Total Stk Mkt + 3% (1)	57	1.7%	-13.6%	1.7%	-13.6%	5.0%	-6.8%	13.2%	-2.3%	11.3%	11.9%	9.2%	10.8%	9.2%	10.8%
Muller and Monroe Emerg PEF	Jan-17	DJ U.S. Total Stk Mkt + 3% (1)	51	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Muller and Monroe MPEFF	Mar-08	DJ U.S. Total Stk Mkt + 3% (1)	7	-0.4%	-13.6%	-0.4%	-13.6%	-2.1%	-6.8%	-0.2%	-2.3%	5.2%	11.9%	11.5%	10.9%	8.9%	11.4%
<b>TOTAL Private Equity</b>	Dec-04	DJ U.S. Total Stk Mkt + 3% (1)	116	0.6%	-13.6%	0.6%	-13.6%	5.5%	-6.8%	11.1%	-2.3%	7.1%	11.9%	6.8%	10.9%	5.2%	10.9%
<b>Fixed Income: Core</b>																	
Garcia Hamilton	Feb-09	Bloomberg Barclays U.S. Aggregate	327	1.5%	1.9%	2.4%	2.9%	3.5%	4.6%	4.0%	4.5%	2.2%	2.0%	3.2%	2.7%	5.3%	3.9%
LM Capital Group	Dec-10	Bloomberg Barclays U.S. Aggregate	169	1.7%	1.9%	3.7%	2.9%	4.4%	4.6%	3.7%	4.5%	2.0%	2.0%	2.9%	2.7%	3.3%	3.1%
Pugh Capital Management	Apr-06	Bloomberg Barclays U.S. Aggregate	170	2.0%	1.9%	3.0%	2.9%	4.6%	4.6%	4.4%	4.5%	2.1%	2.0%	2.8%	2.7%	4.6%	4.2%
Smith Graham & Company	Apr-06	Bloomberg Barclays U.S. Aggregate	109	1.9%	1.9%	3.3%	2.9%	4.8%	4.6%	4.3%	4.5%	1.9%	2.0%	2.8%	2.7%	4.3%	4.2%
<b>Composite, Core Fixed Inc</b>	Apr-06	Bloomberg Barclays U.S. Aggregate	775	1.7%	1.9%	2.9%	2.9%	4.1%	4.6%	4.1%	4.5%	2.1%	2.0%	2.9%	2.7%	4.5%	4.2%
<b>TOTAL Fixed Income</b>	Apr-06	Blended	775	1.7%	1.9%	2.9%	2.9%	4.1%	4.6%	4.1%	4.5%	2.0%	2.1%	2.5%	2.5%	4.3%	4.2%
<b>Real Estate</b>																	
Franklin Templeton EMREFF	Aug-11	NCREIF ODCE Index + 1.5% (1)	31	0.5%	1.9%	0.5%	1.9%	5.7%	4.2%	9.8%	8.9%	13.0%	8.8%	15.9%	10.9%	14.6%	11.8%
Frnkln Templeton MDP RE 2015	Sep-15	NCREIF ODCE Index + 1.5% (1)	42	0.8%	1.9%	0.8%	1.9%	0.5%	4.2%	1.2%	8.9%	-0.3%	8.8%	-1.2%	9.2%	-1.2%	9.2%
Basis Real Estate Fund I	Jan-18	NCREIF ODCE Index + 1.5% (1)	16	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
<b>TOTAL Real Estate</b>	Aug-11	NCREIF ODCE Index + 1.5% (1)	89	0.5%	1.9%	0.5%	1.9%	0.0%	4.2%	5.6%	8.9%	9.0%	8.8%	12.9%	10.9%	12.5%	11.8%
<b>Hedge Funds - Options</b>																	
Gladius - Options	May-18	Blended	94	0.8%	0.9%	5.9%	6.1%	-1.9%	-0.9%	-1.8%	-1.5%	-1.8%	-1.5%	-1.8%	-1.5%	-1.8%	-1.5%
<b>TOTAL Hedge Funds</b>	May-18	Blended	94	0.8%	0.9%	5.9%	6.1%	-1.9%	-0.9%	-1.8%	-1.5%	-1.8%	-1.5%	-1.8%	-1.5%	-1.8%	-1.5%

**Custom Benchmark Composition**

MDP Policy Portfolio	35% Russell 2500 Index, 23% S&P 500, 7% MSCI EAFE and 35% Barclays Capital Aggregate through January 2008; value weighted as of February 2008
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(1) reports quarterly in arrears

Asset Class	\$'s (millions)	Actual %
U.S. Equity	\$ 1,511	43.2%
Private Equity	116	3.3%
Non-U.S. Equity	914	26.1%
Global Equity	-	0.0%
Fixed Income	775	22.2%
TIPS	-	0.0%
Real Estate	89	2.5%
Hedge Funds	94	2.7%
<b>Total Fund</b>	<b>\$ 3,498</b>	<b>100.0%</b>

**SURS Defined Benefit Portfolio  
Investment Performance**

March-19	Incep (1)	Benchmark	\$ millions	% Fund	03/2019 Mgr	03/2019 Bmark	FYTD Mgr	FYTD Bmark	1 YR (2) Mgr	1 YR (2) Bmark	3 YR (2) Mgr	3 YR (2) Bmark	5 YR (2) Mgr	5 YR (2) Bmark	10 YR (2) Mgr	10 YR (2) Bmark
<b>U.S. Equities</b>																
CastleArk Management	Sep-12	Russell 2000 Growth	115	0.6%	-0.29%	-1.35%	7.32%	-3.15%	16.99%	3.85%	18.58%	14.87%	8.84%	8.41%	15.06%	12.96%
Matarin Capital	Jan-18	Russell 2000	92	0.5%	-3.64%	-2.09%	-10.69%	-5.29%	-4.46%	2.05%	-6.49%	-0.54%	-6.49%	-0.54%	-6.49%	-0.54%
Channing SMID Value	Jan-18	Russell 2500 Value	90	0.5%	-1.75%	-1.33%	-6.93%	-3.75%	-5.26%	1.84%	-8.06%	-1.80%	-8.06%	-1.80%	-8.06%	-1.80%
EARNEST Partners	Jun-11	Russell Midcap	166	0.9%	1.62%	0.86%	4.51%	3.55%	6.40%	6.47%	15.04%	11.82%	10.43%	8.81%	12.04%	11.18%
Denali Advisors	Dec-17	Russell 1000 Value	48	0.3%	0.50%	0.64%	-0.04%	4.45%	-0.57%	5.67%	-2.77%	2.14%	-2.77%	2.14%	-2.77%	2.14%
Gladius	Dec-16	Russell 3000	441	2.3%	1.59%	1.46%	0.07%	4.70%	4.97%	8.77%	10.52%	12.71%	10.52%	12.71%	10.52%	12.71%
<i>Active U.S. Equities</i>		Blended	953	5.0%	0.26%	-0.05%	-1.11%	0.51%	3.41%	5.23%	11.00%	10.89%	6.98%	6.75%	14.61%	6.41%
Piedmont Investment Advisors	Jan-08	S&P 500	673	3.5%	1.32%	1.94%	4.56%	5.86%	6.96%	9.50%	14.18%	13.51%	11.45%	10.91%	15.97%	15.92%
T. Rowe Price	Mar-08	S&P 500	441	2.3%	2.24%	1.94%	5.95%	5.86%	9.83%	9.50%	14.54%	13.51%	11.57%	10.91%	16.17%	15.92%
<i>Structured Active U.S. *</i>	Oct-87	Blended	1,114	5.8%	1.68%	1.94%	5.11%	5.86%	8.07%	9.50%	14.34%	13.51%	11.23%	10.91%	17.62%	15.92%
Northern Trust Asset Management	Feb-99	Dow Jones U.S. Total Stock Market	1,253	6.5%	1.44%	1.44%	4.68%	4.61%	8.74%	8.66%	13.52%	13.45%	10.32%	10.29%	16.05%	16.01%
RhumbLine Advisors	Feb-05	Custom / Wilshire 5000	1,047	5.4%	1.48%	1.50%	4.97%	4.91%	9.01%	8.92%	13.56%	13.59%	10.57%	10.52%	15.94%	16.00%
<i>Passive U.S. Equities</i>	Jul-86	Blended	2,300	12.0%	1.46%	1.47%	4.80%	4.74%	8.83%	8.77%	13.53%	13.51%	10.42%	10.39%	16.01%	16.01%
<b>Total U.S. Equities</b>	<b>Oct-81</b>	<b>Dow Jones U.S. Total Stock Market</b>	<b>4,368</b>	<b>22.7%</b>	<b>1.21%</b>	<b>1.44%</b>	<b>3.35%</b>	<b>4.61%</b>	<b>7.28%</b>	<b>8.66%</b>	<b>13.06%</b>	<b>13.45%</b>	<b>9.86%</b>	<b>10.29%</b>	<b>16.16%</b>	<b>16.01%</b>
<b>Non-U.S. Equities</b>																
Ativo Capital Management	Jul-08	MSCI ACWI Ex-US	284	1.5%	1.99%	0.60%	-0.47%	-1.64%	-1.67%	-4.22%	5.42%	8.09%	2.84%	2.57%	10.77%	8.85%
GlobeFlex Capital	Dec-11	MSCI ACWI Ex-US	305	1.6%	0.16%	0.60%	-7.05%	-1.64%	-9.85%	-4.22%	6.91%	8.09%	3.45%	2.57%	7.74%	5.87%
Progress Investment	May-08	MSCI EAFE	220	1.1%	1.25%	0.63%	-1.46%	-2.51%	-2.67%	-3.71%	8.31%	7.27%	2.86%	2.33%	10.00%	8.96%
Strategic Global Advisors	Aug-08	MSCI EAFE	325	1.7%	0.33%	0.63%	-2.59%	-2.51%	-3.61%	-3.71%	6.52%	7.27%	4.10%	2.33%	12.22%	8.96%
<i>Active Non U.S. Equities</i>	Jul-92	Blended	1,134	5.9%	0.87%	0.61%	-3.11%	-2.06%	-4.73%	-3.98%	6.68%	7.70%	2.94%	1.77%	8.99%	22.33%
BTC International Alpha Tilts	Nov-03	MSCI EAFE	518	2.7%	1.09%	0.63%	-3.68%	-2.51%	-4.64%	-3.71%	8.09%	7.27%	3.47%	2.33%	10.38%	8.96%
Fidelity Institutional Asset Mgmt	Dec-11	MSCI ACWI Ex-US	566	2.9%	0.90%	0.60%	-2.29%	-1.64%	-5.66%	-4.22%	7.11%	8.09%	2.50%	2.57%	6.13%	5.87%
<i>Structured Active Non U.S. *</i>	Nov-03	Blended	1,084	5.6%	0.99%	0.61%	-2.96%	-2.06%	-5.18%	-3.98%	7.57%	7.70%	2.96%	2.45%	9.41%	8.61%
BTC Emerging Markets	Oct-09	MSCI Emerging Markets	370	1.9%	0.81%	0.84%	0.50%	0.60%	-7.38%	-7.41%	10.49%	10.68%	3.52%	3.68%	3.78%	3.98%
BTC International	Jul-86	MSCI ACWI Ex-US	1,092	5.7%	0.65%	0.60%	-1.50%	-1.64%	-3.75%	-4.22%	8.49%	8.09%	3.04%	2.57%	9.31%	8.85%
<i>Passive Non U.S. Equities</i>	Jul-86	Blended / MSCI ACWI Ex-US	1,462	7.6%	0.69%	0.66%	-0.95%	-0.97%	-4.28%	-4.59%	8.81%	8.51%	3.09%	2.76%	9.15%	8.84%
<b>Total Non U.S. Equities</b>	<b>Jul-86</b>	<b>MSCI ACWI Ex-US</b>	<b>3,681</b>	<b>19.1%</b>	<b>0.83%</b>	<b>0.60%</b>	<b>-2.21%</b>	<b>-1.64%</b>	<b>-4.64%</b>	<b>-4.22%</b>	<b>7.86%</b>	<b>8.09%</b>	<b>3.01%</b>	<b>2.57%</b>	<b>9.04%</b>	<b>8.85%</b>
<b>Global Equities</b>																
Mondrian Investment Partners	Dec-11	MSCI ACWI	576	3.0%	1.93%	1.26%	5.94%	2.06%	4.87%	2.60%	10.41%	10.67%	5.96%	6.45%	8.86%	9.66%
T. Rowe Price Global Focused Growth	Oct-08	MSCI ACWI	620	3.2%	1.85%	1.26%	4.73%	2.06%	8.27%	2.60%	18.47%	10.67%	12.73%	6.45%	15.82%	11.98%
Wellington Management	Jun-02	Custom / MSCI ACWI	590	3.1%	1.27%	1.26%	2.04%	2.06%	2.62%	2.60%	11.85%	10.67%	7.84%	6.45%	13.74%	11.98%
<b>Total Global Equities</b>	<b>Jan-04</b>	<b>Blended / MSCI ACWI</b>	<b>1,786</b>	<b>9.3%</b>	<b>1.68%</b>	<b>1.26%</b>	<b>4.19%</b>	<b>2.06%</b>	<b>5.33%</b>	<b>2.60%</b>	<b>13.48%</b>	<b>10.67%</b>	<b>8.58%</b>	<b>6.45%</b>	<b>13.12%</b>	<b>11.98%</b>
* Structured Active strategies, also known as Enhanced Index strategies, attempt to add modest amounts of excess return over time within a risk controlled framework.																

**SURS Defined Benefit Portfolio  
Investment Performance**

March-19	Incep (1)	Benchmark	\$ millions	% Fund	03/2019 Mgr	03/2019 Bmark	FYTD Mgr	FYTD Bmark	1 YR (2) Mgr	1 YR (2) Bmark	3 YR (2) Mgr	3 YR (2) Bmark	5 YR (2) Mgr	5 YR (2) Bmark	10 YR (2) Mgr	10 YR (2) Bmark
<b>Private Equities</b>																
Adams Street Partners	Jan-91	DJ U.S. Total Stock Market + 3% (3)	748	3.9%	0.28%	-13.61%	5.41%	-6.77%	14.18%	-2.30%	13.22%	11.92%	10.90%	10.86%	12.06%	16.22%
Fairview Capital Partners	Apr-14	DJ U.S. Total Stock Market + 3% (3)	57	0.3%	1.73%	-13.61%	5.00%	-6.77%	13.15%	-2.30%	11.25%	11.92%	9.24%	10.84%	9.24%	10.84%
Mesirov Private Equity	Jan-18	DJ U.S. Total Stock Market + 3% (3)	34	0.2%	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Muller and Monroe	Dec-04	DJ U.S. Total Stock Market + 3% (3)	58	0.3%	-0.56%	-13.61%	6.15%	-6.77%	8.59%	-2.30%	2.08%	11.92%	4.76%	10.86%	6.35%	16.22%
Pantheon Ventures, Inc.	Mar-02	DJ U.S. Total Stock Market + 3% (3)	407	2.1%	-0.58%	-13.61%	2.90%	-6.77%	10.49%	-2.30%	11.28%	11.92%	8.86%	10.86%	10.49%	16.22%
<b>Total Private Equities</b>	<b>Jan-91</b>	<b>DJ U.S. Total Stock Market + 3% (3)</b>	<b>1,306</b>	<b>6.8%</b>	<b>0.05%</b>	<b>-13.61%</b>	<b>4.57%</b>	<b>-6.77%</b>	<b>12.62%</b>	<b>-2.30%</b>	<b>12.09%</b>	<b>11.92%</b>	<b>9.82%</b>	<b>10.86%</b>	<b>11.13%</b>	<b>16.22%</b>
<b>TOTAL EQUITIES</b>																
<b>TOTAL EQUITIES</b>	<b>Oct-81</b>	<b>Blended</b>	<b>11,139</b>	<b>57.9%</b>	<b>1.00%</b>	<b>-0.48%</b>	<b>2.20%</b>	<b>1.71%</b>	<b>3.55%</b>	<b>2.68%</b>	<b>11.39%</b>	<b>11.31%</b>	<b>7.51%</b>	<b>7.56%</b>	<b>12.90%</b>	<b>13.58%</b>
<b>Fixed Income</b>																
Cash Flow	Oct-81	90-day T-bills	275	1.4%	0.44%	0.20%	3.59%	1.73%	4.46%	2.21%	2.26%	1.26%	1.42%	0.79%	0.80%	0.44%
<i>Core Fixed Income Managers</i>																
Garcia Hamilton & Associates	Feb-09	Bloomberg Barclays U.S. Aggregate	327	1.7%	1.46%	1.92%	3.53%	4.65%	4.01%	4.48%	2.21%	2.03%	3.22%	2.74%	5.27%	3.77%
Progress Investment	May-08	Bloomberg Barclays U.S. Aggregate	153	0.8%	1.90%	1.92%	4.37%	4.65%	4.01%	4.48%	2.38%	2.03%	2.76%	2.74%	4.26%	3.77%
Pugh Capital Management	Apr-06	Bloomberg Barclays U.S. Aggregate	170	0.9%	1.99%	1.92%	4.56%	4.65%	4.35%	4.48%	2.07%	2.03%	2.77%	2.74%	4.23%	3.77%
Smith Graham & Company	Apr-06	Bloomberg Barclays U.S. Aggregate	109	0.6%	1.89%	1.92%	4.75%	4.65%	4.27%	4.48%	1.93%	2.03%	2.75%	2.74%	4.20%	3.77%
<i>Core Plus Fixed Income Managers</i>																
LM Capital Group	Dec-10	Bloomberg Barclays U.S. Aggregate	169	0.9%	1.75%	1.92%	4.40%	4.65%	3.70%	4.48%	2.00%	2.03%	2.86%	2.74%	3.33%	3.07%
Neuberger Berman	Dec-10	Bloomberg Barclays U.S. Aggregate	363	1.9%	1.81%	1.92%	5.14%	4.65%	4.28%	4.48%	3.16%	2.03%	3.15%	2.74%	3.77%	3.07%
PIMCO Total Return	Oct-81	Bloomberg Barclays U.S. Aggregate	414	2.2%	1.90%	1.92%	4.52%	4.65%	4.70%	4.48%	2.78%	2.03%	2.91%	2.74%	5.21%	3.77%
TCW MetWest	Nov-01	Bloomberg Barclays U.S. Aggregate	571	3.0%	2.00%	1.92%	4.79%	4.65%	4.89%	4.48%	2.53%	2.03%	2.96%	2.74%	6.31%	3.77%
<i>Active Fixed Income</i>	Oct-81	Bloomberg Barclays U.S. Aggregate	2,551	13.3%	1.74%	1.92%	4.43%	4.65%	4.42%	4.48%	2.40%	2.03%	2.77%	2.74%	5.07%	3.77%
State Street Global Advisors	Sep-10	Bloomberg Barclays U.S. Aggregate	562	2.9%	1.94%	1.92%	4.69%	4.65%	4.52%	4.48%	2.05%	2.03%	2.76%	2.74%	2.84%	2.82%
<i>Passive Fixed Income</i>	Oct-86	Blended / Bloomberg Barclays U.S. Agg	562	2.9%	1.94%	1.92%	4.69%	4.65%	4.52%	4.48%	2.05%	2.03%	2.76%	2.74%	3.01%	2.95%
PIMCO Unconstrained	May-13	LIBOR + 3%	504	2.6%	0.47%	0.47%	3.15%	4.10%	3.67%	5.44%	4.97%	4.47%	2.93%	3.99%	2.40%	3.89%
<i>Absolute Return Fixed Income</i>	May-13	LIBOR + 3%	504	2.6%	0.47%	0.47%	3.15%	4.10%	3.67%	5.44%	4.97%	4.47%	2.93%	3.99%	2.40%	3.89%
<b>Total Core Fixed Income</b>	<b>Oct-81</b>	<b>Bloomberg Barclays U.S. Aggregate</b>	<b>3,618</b>	<b>18.8%</b>	<b>1.59%</b>	<b>1.92%</b>	<b>4.27%</b>	<b>4.65%</b>	<b>4.30%</b>	<b>4.48%</b>	<b>2.68%</b>	<b>2.03%</b>	<b>2.78%</b>	<b>2.74%</b>	<b>4.83%</b>	<b>3.77%</b>
<b>TIPS</b>																
RhumbLine TIPS	May-17	Bloomberg Barclays U.S. TIPS	708	3.7%	1.87%	1.84%	1.95%	1.92%	2.70%	2.70%	1.68%	1.67%	1.68%	1.67%	1.68%	1.67%
<b>Total TIPS</b>	<b>Jul-04</b>	<b>Bloomberg Barclays U.S. TIPS (4)</b>	<b>708</b>	<b>3.7%</b>	<b>1.87%</b>	<b>1.84%</b>	<b>1.95%</b>	<b>1.92%</b>	<b>2.70%</b>	<b>2.70%</b>	<b>1.87%</b>	<b>1.70%</b>	<b>1.83%</b>	<b>1.94%</b>	<b>3.86%</b>	<b>3.41%</b>
<b>Emerging Market Debt</b>																
Colchester Local Markets Debt Fund	Apr-15	JPM GBI-EM Global Diversif unhedged	141	0.7%	-1.64%	-1.33%	3.10%	3.17%	-7.19%	-7.58%	5.07%	3.27%	1.81%	1.31%	1.81%	1.31%
Progress Investment	Apr-15	JPM Corp Em Mkts Bond Index-Broad	135	0.7%	1.37%	1.43%	6.64%	6.94%	3.89%	5.02%	6.45%	6.04%	4.70%	4.85%	4.70%	4.85%
Prudential Emerging Mkts Debt Blend	Jun-15	Custom	319	1.7%	0.11%	0.05%	5.63%	5.64%	-2.99%	-1.78%	5.54%	4.59%	5.09%	4.20%	5.09%	4.20%
<b>Total Emerging Market Debt</b>	<b>Mar-15</b>	<b>Custom</b>	<b>594</b>	<b>3.1%</b>	<b>-0.03%</b>	<b>0.05%</b>	<b>5.24%</b>	<b>5.38%</b>	<b>-2.57%</b>	<b>-1.57%</b>	<b>5.14%</b>	<b>4.67%</b>	<b>3.26%</b>	<b>3.75%</b>	<b>3.26%</b>	<b>3.75%</b>
<b>TOTAL FIXED INCOME</b>																
<b>TOTAL FIXED INCOME</b>	<b>Oct-81</b>	<b>Custom</b>	<b>4,920</b>	<b>25.6%</b>	<b>1.43%</b>	<b>1.53%</b>	<b>4.03%</b>	<b>4.29%</b>	<b>3.21%</b>	<b>3.62%</b>	<b>2.85%</b>	<b>2.48%</b>	<b>2.72%</b>	<b>2.92%</b>	<b>4.73%</b>	<b>4.06%</b>

**SURS Defined Benefit Portfolio  
Investment Performance**

March-19	Incep (1)	Benchmark	\$ millions	% Fund	03/2019 Mgr	03/2019 Bmark	FYTD Mgr	FYTD Bmark	1 YR (2) Mgr	1 YR (2) Bmark	3 YR (2) Mgr	3 YR (2) Bmark	5 YR (2) Mgr	5 YR (2) Bmark	10 YR (2) Mgr	10 YR (2) Bmark
<b>Real Estate</b>																
<i>Core Direct Real Estate Managers</i>																
Heitman America Real Estate Trust	Jul-14	NCREIF ODCE Index (3)	220	1.1%	0.58%	1.52%	4.61%	3.42%	6.71%	7.36%	7.33%	7.27%	9.38%	9.31%	9.38%	9.31%
JPMCB Strategic Property Fund	Jun-14	NCREIF ODCE Index (3)	223	1.2%	1.68%	1.52%	5.03%	3.42%	7.11%	7.36%	6.93%	7.27%	9.02%	9.76%	9.02%	9.76%
UBS Trumbull Property Fund	Jun-06	NCREIF ODCE Index (3)	130	0.7%	1.51%	1.52%	4.36%	3.42%	6.28%	7.36%	5.95%	7.27%	8.19%	9.41%	7.18%	6.03%
<i>Core Plus Direct Real Estate Managers</i>																
Blackstone Property Partners	Mar-18	NCREIF ODCE Index (3)	17	0.1%	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Carlyle Property Investors	Oct-18	NCREIF ODCE Index (3)	100	0.5%	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
<i>Non-Core Direct Real Estate Managers</i>																
Blue Vista Real Estate Partners IV	Apr-16	NCREIF ODCE Index + 1.5% (3)	30	0.2%	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Brookfield Strategic RE Partners II	Feb-16	NCREIF ODCE Index + 1.5% (3)	28	0.1%	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Crow Holdings Realty Partners VII	Jan-16	NCREIF ODCE Index + 1.5% (3)	22	0.1%	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Crow Holdings Realty Partners VIII	Sep-18	NCREIF ODCE Index + 1.5% (3)	9	0.0%	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Dune Real Estate Parallel Fund II	Apr-09	NCREIF ODCE Index + 1.5% (3)	24	0.1%	-1.36%	1.90%	4.14%	4.17%	6.95%	8.86%	8.07%	8.77%	12.98%	10.91%	16.08%	9.31%
Dune Real Estate Fund III	Jul-13	NCREIF ODCE Index + 1.5% (3)	132	0.7%	2.78%	1.90%	12.21%	4.17%	12.24%	8.86%	13.78%	8.77%	14.16%	11.25%	13.16%	11.25%
Franklin Templeton EMREFF	Aug-11	NCREIF ODCE Index + 1.5% (3)	31	0.2%	0.47%	1.90%	5.72%	4.17%	9.83%	8.86%	13.01%	8.77%	15.93%	10.91%	14.57%	11.75%
Franklin Templeton FTPREF	Jun-12	NCREIF ODCE Index + 1.5% (3)	16	0.1%	31.23%	1.90%	22.93%	4.17%	30.48%	8.86%	20.27%	8.77%	27.05%	10.91%	22.30%	11.70%
Franklin Templeton MDP RE 2015	Sep-15	NCREIF ODCE Index + 1.5% (3)	42	0.2%	0.77%	1.90%	0.52%	4.17%	1.16%	8.86%	-0.30%	8.77%	-1.17%	9.20%	-1.17%	9.20%
Courtland/Pru RE Global Ptrnshp II	Apr-12	NCREIF ODCE Index + 1.5% (3)	40	0.2%	0.00%	1.90%	1.01%	4.17%	4.12%	8.86%	7.47%	8.77%	8.66%	11.44%	8.88%	11.44%
<i>Real Estate Debt Managers</i>																
Basis Real Estate Fund I	Jan-18	NCREIF ODCE Index + 1.5% (3)	16	0.1%	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Oaktree Real Estate Debt Fund II	Dec-17	NCREIF ODCE Index + 1.5% (3)	11	0.1%	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
<b>Total Direct Real Estate</b>	<b>Jun-05</b>	<b>NCREIF ODCE Index (3)</b>	<b>1,092</b>	<b>5.7%</b>	<b>1.78%</b>	<b>1.52%</b>	<b>5.64%</b>	<b>3.42%</b>	<b>7.63%</b>	<b>7.36%</b>	<b>7.84%</b>	<b>7.27%</b>	<b>9.99%</b>	<b>9.41%</b>	<b>7.83%</b>	<b>6.03%</b>
<b>Global REITs</b>																
BTC Global REIT Fund	Mar-13	FTSE EPRA/NAREIT Developed Index	619	3.2%	3.66%	3.51%	8.72%	7.75%	14.61%	13.27%	6.65%	5.68%	7.25%	6.42%	6.67%	5.87%
<b>Total GLOBAL REITs</b>	<b>Apr-07</b>	<b>Blended / FTSE EPRA/NAREIT Dev In</b>	<b>619</b>	<b>3.2%</b>	<b>3.66%</b>	<b>3.51%</b>	<b>8.72%</b>	<b>7.75%</b>	<b>14.61%</b>	<b>13.27%</b>	<b>6.06%</b>	<b>5.68%</b>	<b>7.17%</b>	<b>6.42%</b>	<b>13.82%</b>	<b>13.63%</b>
<b>TOTAL REAL ESTATE INVESTMENT TRUSTS</b>																
<b>TOTAL REITs</b>	<b>Mar-00</b>	<b>Custom</b>	<b>619</b>	<b>3.2%</b>	<b>3.66%</b>	<b>3.51%</b>	<b>8.72%</b>	<b>7.75%</b>	<b>14.61%</b>	<b>13.27%</b>	<b>6.06%</b>	<b>5.68%</b>	<b>7.90%</b>	<b>7.78%</b>	<b>16.51%</b>	<b>16.62%</b>

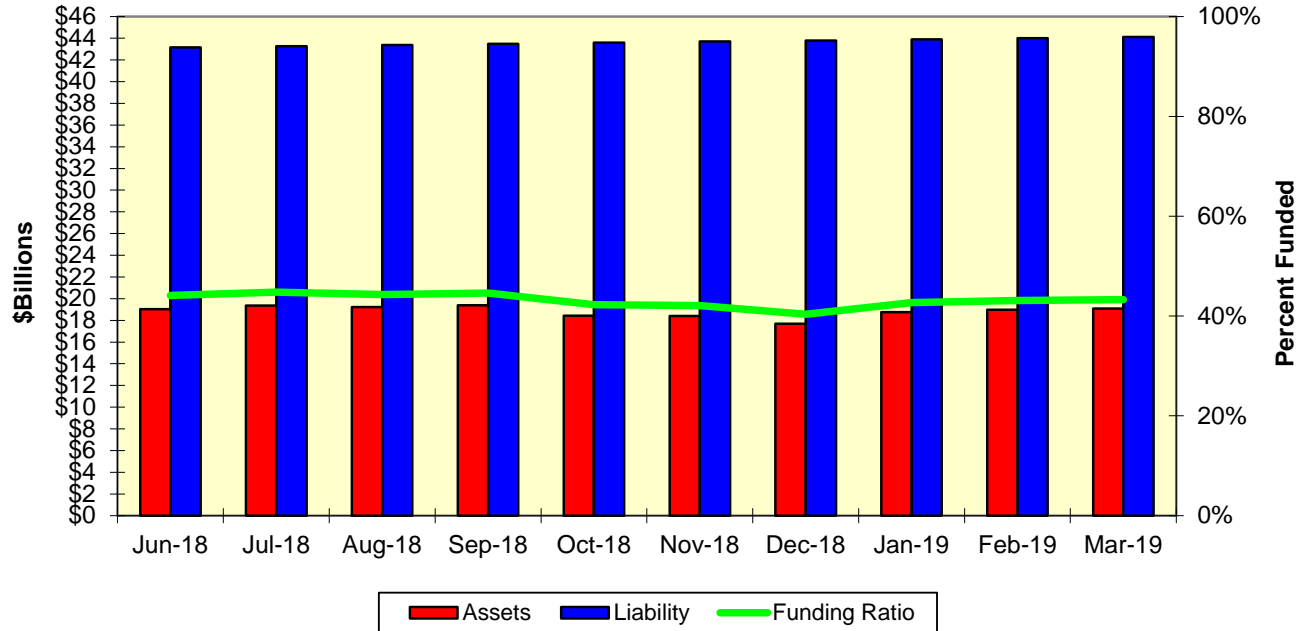


**SURS Defined Benefit Portfolio  
Investment Performance**

March-19	Incep (1)	Benchmark	\$ millions	% Fund	03/2019 Mgr	03/2019 Bmark	FYTD Mgr	FYTD Bmark	1 YR (2) Mgr	1 YR (2) Bmark	3 YR (2) Mgr	3 YR (2) Bmark	5 YR (2) Mgr	5 YR (2) Bmark	10 YR (2) Mgr	10 YR (2) Bmark
<b>Hedge Fund</b>																
AQR Capital Management	Jun-18	Blended	171	0.9%	0.71%	0.94%	1.41%	-0.42%	1.41%	-0.42%	1.41%	-0.42%	1.41%	-0.42%	1.41%	-0.42%
Gladius - Options	May-18	Blended	93	0.5%	0.80%	0.92%	-1.91%	-0.94%	-1.80%	-1.48%	-1.80%	-1.48%	-1.80%	-1.48%	-1.80%	-1.48%
Neuberger Berman - Options	Apr-18	CBOE S&P 500 PutWrite Index	351	1.8%	1.56%	1.21%	2.08%	-2.28%	4.32%	-0.18%	4.32%	-0.18%	4.32%	-0.18%	4.32%	-0.18%
<i>Options Strategies</i>	Apr-18	Blended	616	3.2%	1.26%	1.12%	1.05%	-1.31%	3.00%	0.62%	3.00%	0.62%	3.00%	0.62%	3.00%	0.62%
KKR Prisma Codlin Fund	Mar-16	LIBOR + 5%	71	0.4%	-0.09%	0.63%	-2.37%	5.64%	-1.88%	7.55%	2.20%	6.53%	1.94%	6.51%	1.94%	6.51%
PAAMCO Newport Monarch	Apr-16	LIBOR + 5%	163	0.8%	-0.20%	0.63%	-1.11%	5.64%	0.55%	7.55%	3.07%	6.53%	3.07%	6.53%	3.07%	6.53%
<i>Hedge Fund of Funds</i>	Mar-16	LIBOR + 5%	234	1.2%	-0.17%	0.63%	-1.61%	5.64%	-0.68%	7.55%	2.56%	6.53%	2.30%	6.51%	2.30%	6.51%
<b>Total Hedge Funds</b>	<b>Mar-16</b>	<b>Custom</b>	<b>850</b>	<b>4.4%</b>	<b>0.82%</b>	<b>0.96%</b>	<b>0.15%</b>	<b>3.13%</b>	<b>1.37%</b>	<b>5.13%</b>	<b>3.26%</b>	<b>5.73%</b>	<b>2.98%</b>	<b>5.73%</b>	<b>2.98%</b>	<b>5.73%</b>
<b>Commodities</b>																
Invesco Balanced Risk Commodity Trust	Jun-16	Bloomberg Commodity Index	244	1.3%	-0.57%	-0.18%	-6.30%	-5.63%	-6.62%	-5.25%	-1.72%	-1.95%	-1.72%	-1.95%	-1.72%	-1.95%
PIMCO Commodity Alpha Fund	May-16	Bloomberg Commodity Index	116	0.6%	1.55%	-0.18%	7.71%	-5.63%	8.76%	-5.25%	12.69%	-0.49%	12.69%	-0.49%	12.69%	-0.49%
<b>Total Commodities</b>	<b>May-16</b>	<b>Bloomberg Commodity Index</b>	<b>360</b>	<b>1.9%</b>	<b>0.10%</b>	<b>-0.18%</b>	<b>-2.20%</b>	<b>-5.63%</b>	<b>-2.16%</b>	<b>-5.25%</b>	<b>2.92%</b>	<b>-0.49%</b>	<b>2.92%</b>	<b>-0.49%</b>	<b>2.92%</b>	<b>-0.49%</b>
<b>Opportunity Fund</b>																
Alinda Capital Partners	Dec-09	CPI + 5% (3)	23	0.1%	-7.32%	0.77%	-10.87%	2.20%	-13.32%	6.91%	-10.20%	7.03%	1.36%	6.51%	1.00%	6.66%
Macquarie Infrastructure Partners II	Apr-10	CPI + 5% (3)	38	0.2%	1.71%	0.77%	3.56%	2.20%	6.64%	6.91%	6.37%	7.03%	4.11%	6.51%	8.04%	6.66%
Macquarie Infrastructure Partners III	Oct-14	CPI + 5% (3)	54	0.3%	3.44%	0.77%	5.28%	2.20%	14.10%	6.91%	14.38%	7.03%	12.19%	6.28%	12.19%	6.28%
Macquarie Infrastructure Partners IV	Apr-18	CPI + 5% (3)	14	0.1%	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
<i>Infrastructure</i>	Dec-09	CPI + 5% (3)	129	0.7%	0.68%	0.77%	1.09%	2.20%	4.33%	6.91%	3.08%	7.03%	4.96%	6.51%	5.95%	6.66%
<b>TOTAL OPPORTUNITY FUND</b>	<b>Jul-99</b>	<b>Custom</b>	<b>129</b>	<b>0.7%</b>	<b>0.03%</b>	<b>0.10%</b>	<b>4.00%</b>	<b>4.51%</b>	<b>4.24%</b>	<b>7.12%</b>	<b>3.03%</b>	<b>7.24%</b>	<b>5.41%</b>	<b>6.70%</b>	<b>11.90%</b>	<b>8.81%</b>
<b>TOTAL FUND</b>																
<b>TOTAL FUND ex-Overlay</b>	<b>Sep-14</b>	<b>Policy Portfolio</b>	<b>19,110</b>	<b>99.4%</b>	<b>1.11%</b>	<b>0.44%</b>	<b>2.75%</b>	<b>2.94%</b>	<b>3.77%</b>	<b>3.66%</b>	<b>8.11%</b>	<b>8.13%</b>	<b>6.04%</b>	<b>6.06%</b>	<b>10.65%</b>	<b>10.92%</b>
Parametric Clifton Cash Overlay	Sep-14		113	0.6%	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
<b>TOTAL FUND</b>	<b>Oct-81</b>	<b>Policy Portfolio</b>	<b>19,223</b>	<b>100.0%</b>	<b>1.13%</b>	<b>0.44%</b>	<b>2.96%</b>	<b>2.94%</b>	<b>3.95%</b>	<b>3.66%</b>	<b>8.30%</b>	<b>8.13%</b>	<b>6.07%</b>	<b>6.06%</b>	<b>10.66%</b>	<b>10.92%</b>
Policy Portfolio Benchmark consists of 23% U.S. Equities (Dow Jones U.S. Total Stock Market), 19% Non-U.S. Equities (MSCI ACWI ex-US), 8% Global Equities (MSCI ACWI), 6% Private Equity (Dow Jones U.S. Total Stock Market + 3%), 19% Fixed Income (Bloomberg Barclays U.S. Aggregate), 4% TIPS (Bloomberg Barclays U.S. TIPS), 3% Emerging Market Debt (Blended Benchmark), 6% Direct Real Estate (NCREIF ODCE Index), 4% REITs (Blended Benchmark), 2% Commodities (Bloomberg Commodity Index), 5% Hedge Funds (Blended Benchmark) and 1% Opportunity Fund (Blended Benchmark)																
(1) inception date of account (2) or since inception, whichever is less (3) reports quarterly in arrears (4) TIPS benchmark used beginning April 2006 (NMF) not meaningful (FOF) fund of funds																

STATE UNIVERSITIES RETIREMENT SYSTEM

**SURS Projected Funding Status  
2019 Fiscal Year-to-Date Results**



	<u>Assets</u>	<u>Estimated Liabilities</u>	<u>Unfunded Liabilities</u>	<u>Market Value Funding Ratio</u>	<u>Rate of Return</u>	
					<u>Month</u>	<u>FYTD</u>
Jun-18	\$ 19.04	\$ 43.15	\$ 24.12	44.1%		
Jul-18	19.38	43.26	23.88	44.8%	1.55%	1.55%
Aug-18	19.23	43.37	24.14	44.3%	0.72%	2.28%
Sep-18	19.38	43.48	24.10	44.6%	0.21%	2.50%
Oct-18	18.42	43.59	25.17	42.3%	-4.71%	-2.33%
Nov-18	18.40	43.69	25.29	42.1%	0.99%	-1.36%
Dec-18	17.68	43.80	26.13	40.4%	-3.46%	-4.78%
Jan-19	18.75	43.91	25.16	42.7%	5.22%	0.19%
Feb-19	18.97	44.02	25.05	43.1%	1.61%	1.81%
Mar-19	19.10	44.13	25.03	43.3%	1.13%	2.96%

**Note:** Assets and liabilities are estimated and unaudited through March 31, 2019. The fund had an actuarial value funding ratio of 42.8% at the end of Fiscal Year 2018, utilizing a 6.75% assumed rate of return.