

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

Investment Update



February 2019

Volume 29, Issue 8

	February 2019	Quarter Ended	Fiscal Y-T-D	1 Year Ended ¹	3 Years Ended ¹	5 Years Ended ¹	10 Years Ended ¹
SURS TOTAL FUND	1.6%	3.2%	1.8%	2.3%	9.7%	5.9%	11.0%
Market Goal / Policy Portfolio	1.4%	3.3%	2.5%	3.1%	9.9%	6.2%	11.4%
Public Funds Index	2.0%	2.9%	2.2%	2.3%	10.0%	6.0%	10.4%

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	\$ 4,492	\$ (35)	\$ 4,457	11.7%	5.7%	5.9%	23.3%	23.0%	23.0%
Private Equity	1,295		1,295	0.0%	0.0%	6.8%	6.8%	6.0%	6.0%
Non-U.S. Equity	3,650	53	3,703	7.9%	5.6%	5.9%	19.4%	19.0%	19.0%
Global Equity	1,756	(125)	1,631	-0.7%	0.0%	9.2%	8.5%	8.0%	8.0%
Fixed Income	3,665	83	3,748	3.9%	0.0%	15.7%	19.6%	19.0%	19.0%
TIPS	695		695	3.6%	0.0%	0.0%	3.6%	4.0%	4.0%
Emerging Market Debt	595		595	0.0%	0.0%	3.1%	3.1%	3.0%	3.0%
Real Estate	1,662	0	1,662	3.1%	0.0%	5.6%	8.7%	10.0%	10.0%
Hedged Strategies	804		804	0.0%	0.0%	4.2%	4.2%	5.0%	5.0%
Commodities	359	24	383	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%
Total Fund	\$ 19,102	\$ 0	\$ 19,102	29.7%	11.4%	58.9%	100.0%	100.0%	100.0%

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

Total Fund Summary

SURS total fund returned 1.6% for February, exceeding the Market Goal's return of 1.4%.

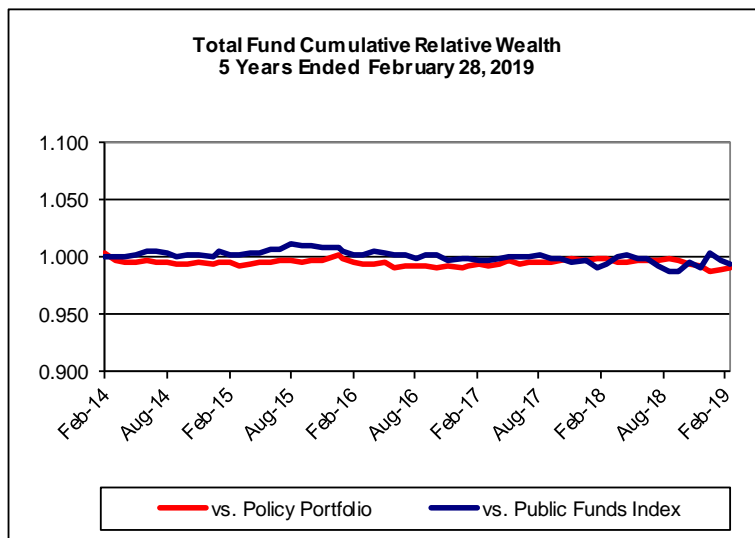
The higher return relative to the Market Goal during February was due primarily to:

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

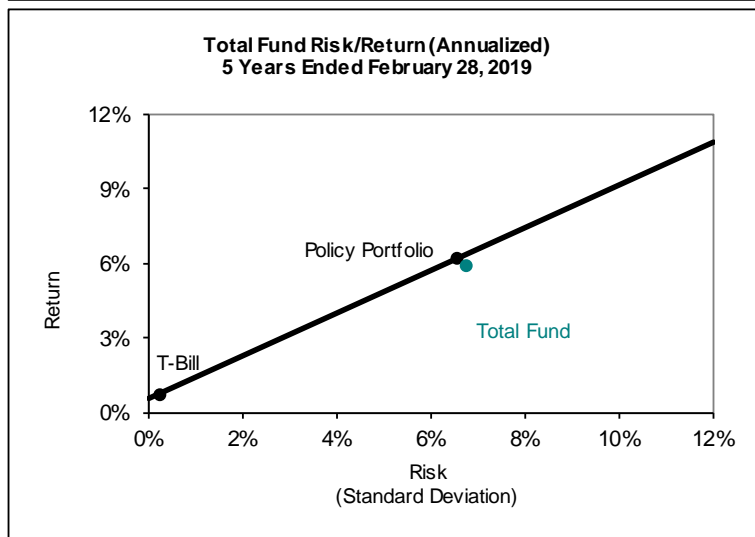
Investment Management Firms Utilized by SURS		
Emerging, Minority, Women and Disabled Ownership as of December 2018		
	Actual	Goal
As a % of Total Assets	29.5%	
As a % of Total Assets, per Public Act 96-0006	14.4%	20.0%
As a % of Total Actively-Managed Assets, per Public Act 96-0006	25.0%	25.0%

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 0.9% below the Policy Portfolio. The chart also indicates that during the same time period, SURS portfolio has underperformed the median Public Funds Index by approximately 0.6%.



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 43 basis points on an annualized basis (5.92% versus required return of 6.35%).

SURS Total Fund Investment Performance			
As of February 2019			
	SURS Fund	CPI-U *	SURS Real Return
1 Year Ended	2.3%	1.5%	0.7%
5 Years Ended	5.9%	1.5%	4.4%
10 Years Ended	11.0%	1.8%	9.2%
20 Years Ended	6.4%	2.2%	4.2%
25 Years Ended	7.9%	2.2%	5.7%
30 Years Ended	8.3%	2.5%	5.8%
Since October 1981	9.7%	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.

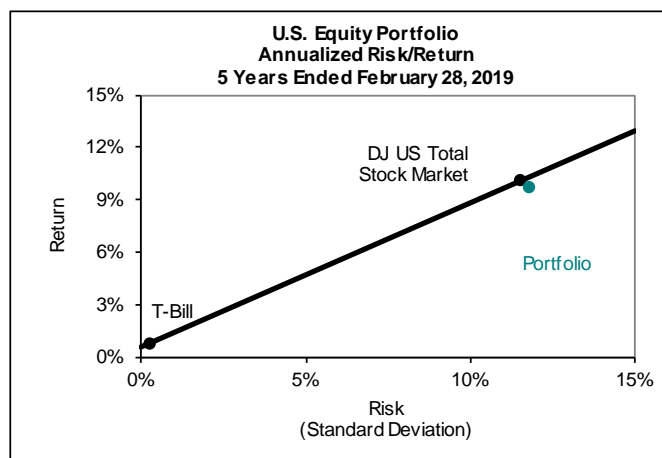
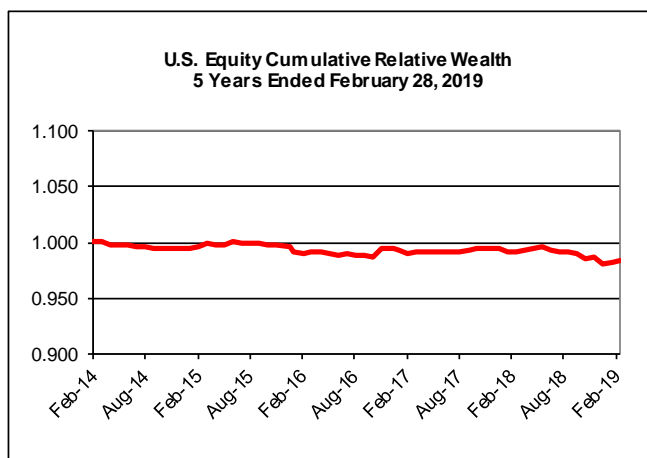
U.S. Equities

U.S. Equities experienced positive returns for the month of February. The broad market, as measured by the Dow Jones U.S. Total Stock Market (TSM) Index, posted a return of 3.5% for the month. During February, small cap outperformed large cap stocks, and the performance of growth versus value stocks was mixed. SURS portfolio outperformed the benchmark for the month, returning 3.6%.

	February 2019	FYTD	1 YR	3 YR	5 YR	10 YR
SURS	3.6%	2.1%	4.2%	15.2%	9.7%	17.0%
Performance Benchmark	3.5%	3.1%	5.0%	15.5%	10.1%	16.8%
DJ U.S. Total Stock Market	3.5%	3.1%	5.0%	15.5%	10.1%	16.8%
DJ U.S. Large Cap TSM	3.3%	3.8%	5.0%	15.5%	10.5%	16.7%
DJ U.S. Lrg Cap Growth TSM	2.7%	2.6%	4.3%	18.2%	11.8%	17.6%
DJ U.S. Lrg Cap Value TSM	3.5%	4.6%	3.5%	13.4%	9.0%	15.4%
DJ U.S. Small Cap TSM	5.0%	-2.1%	6.9%	16.1%	7.6%	18.3%
DJ U.S. Sm Cap Growth TSM	6.1%	-0.8%	6.6%	18.6%	7.3%	18.8%
DJ U.S. Sm Cap Value TSM	3.9%	-3.4%	7.0%	13.6%	7.6%	17.7%
S&P 500	3.2%	3.8%	4.7%	15.3%	10.7%	16.7%
Russell 3000	3.5%	3.2%	5.0%	15.5%	10.2%	16.8%
Russell 2000	5.2%	-3.3%	5.6%	16.7%	7.4%	16.6%

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 1.65%. On a risk-adjusted basis, SURS U.S. Equity portfolio return trailed its benchmark by 58 basis points while incurring slightly greater risk than the benchmark. SURS portfolio has returned 9.72%, while the risk-adjusted benchmark return is 10.30%.



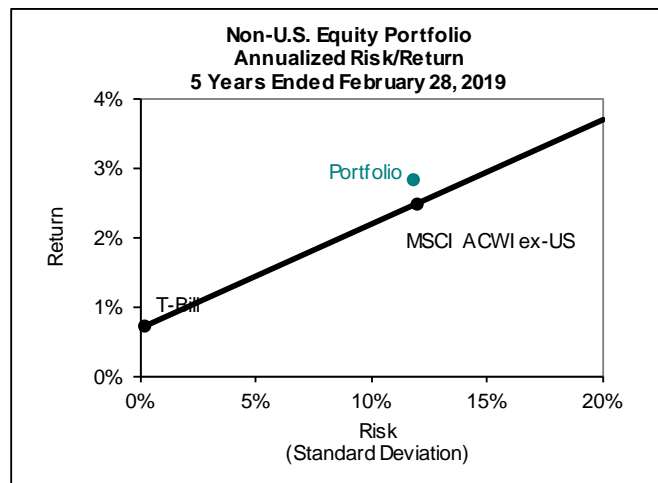
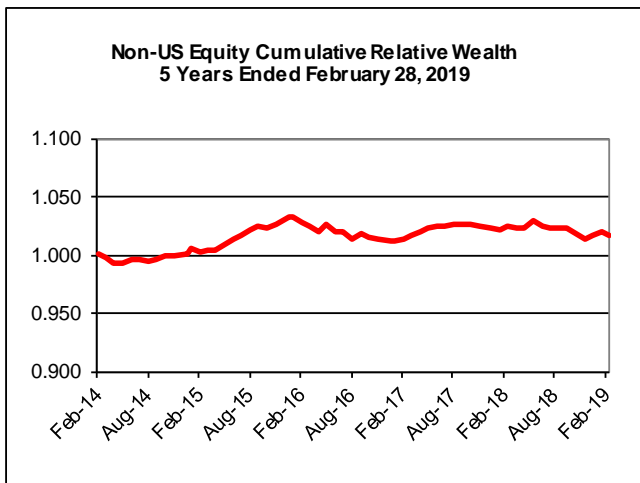
Non-U.S. Equities

Non-U.S. Equities posted positive returns for the month of February. The broad international markets, as represented by the MSCI All Country World Ex-US Index, returned 2.0%. SURS portfolio performance lagged the benchmark for the period, returning 1.6%. 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.

	February 2019	FYTD	1 YR	3 YR	5 YR	10YR
SURS	1.6%	-3.0%	-7.2%	10.3%	2.8%	9.7%
Performance Benchmark	2.0%	-2.2%	-6.5%	10.7%	2.5%	9.6%
MSCI All Country World Ex-US	2.0%	-2.2%	-6.5%	10.7%	2.5%	9.6%
MSCI All Country World Ex-US Growth	2.7%	-3.2%	-5.9%	10.5%	3.7%	10.1%
MSCI All Country World Ex-US Value	1.2%	-1.2%	-7.0%	10.9%	1.3%	9.2%
MSCI EAFE	2.5%	-3.1%	-6.0%	9.3%	2.1%	9.6%
MSCI EAFE Growth	3.4%	-3.1%	-4.2%	9.2%	3.4%	10.2%
MSCI EAFE Value	1.7%	-3.1%	-7.9%	9.4%	0.6%	8.9%
MSCI EAFE Small Cap	2.3%	-8.0%	-10.2%	10.6%	4.7%	13.8%
MSCI Emerging Markets	0.2%	-0.2%	-9.9%	15.0%	4.1%	10.3%

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 1.63%. On a risk-adjusted basis, SURS Non-U.S. Equity portfolio has outpaced its benchmark by 35 basis points, generating a higher return although with slightly less volatility than the benchmark. SURS portfolio has returned 2.82%, while the risk-adjusted benchmark return is 2.47 %.



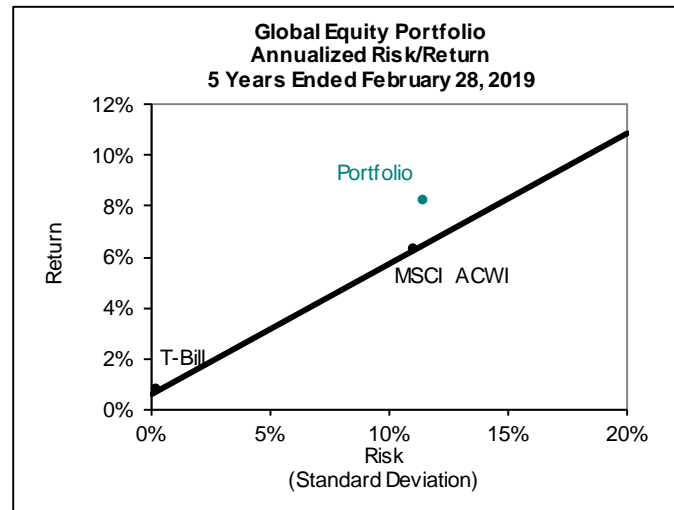
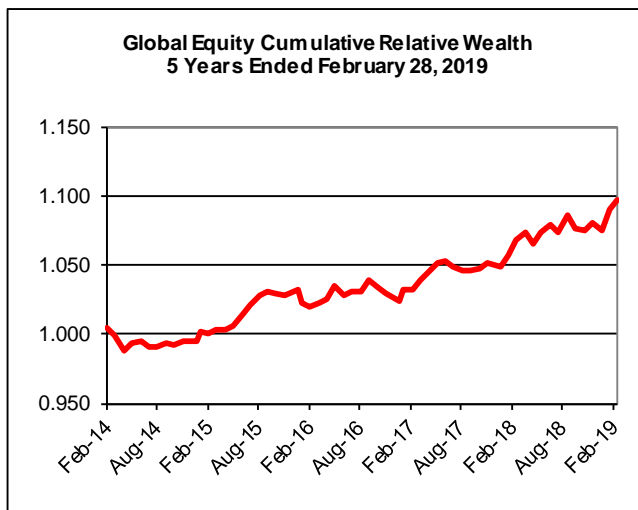
Global Equities

Global Equities posted positive returns for the month of February. The broad market as measured by the MSCI All Country World Index (ACWI) returned 2.7% during the month. SURS portfolio outperformed the benchmark return during February by 0.6%, returning 3.3%.

	February 2019	FYTD	1 YR	3 YR	5 YR	10 YR
SURS	3.3%	2.5%	1.9%	15.7%	8.2%	13.9%
Performance Benchmark	2.7%	0.8%	-0.8%	12.9%	6.3%	12.7%
MSCI All Country World	2.7%	0.8%	-0.8%	12.9%	6.3%	12.7%
MSCI World	3.0%	0.9%	0.4%	12.6%	6.5%	13.1%
Dow Jones U.S. Total Stock Mkt	3.5%	3.1%	5.0%	15.5%	10.1%	16.8%
MSCI All Country World Ex-US	2.0%	-2.2%	-6.5%	10.7%	2.5%	9.6%

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 9.75%. 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 167 basis points on an annualized basis of 8.18% versus a required return of 6.51%.



Private Equities

Private Equities posted positive returns for the quarter ended December. 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 December 31, 2018 was 16.8% as compared to its benchmark return of 20.6%.

	December 2018	FYTD	1 YR	3 YR	5 YR	10 YR
SURS	4.5%	4.5%	16.8%	12.5%	11.2%	9.0%
Performance Benchmark	7.9%	7.9%	20.6%	20.0%	16.4%	15.0%

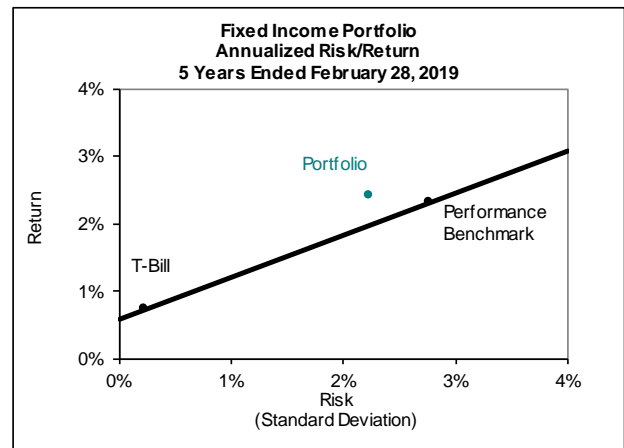
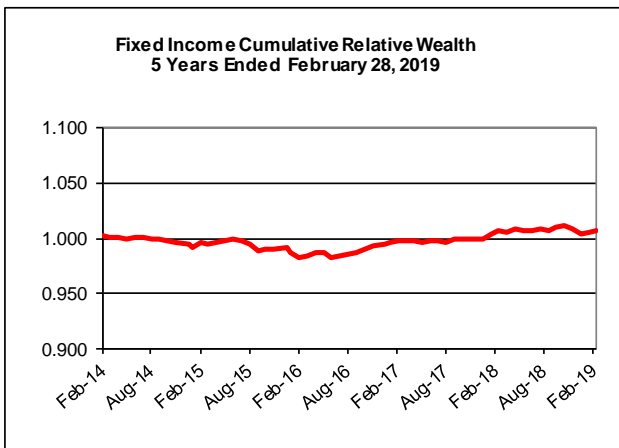
Fixed Income

The U.S. fixed income markets experienced negative returns for the month of February. The broad market, as measured by the Bloomberg Barclays U.S. Aggregate Index, posted a return of -0.1% for the month. SURS core/core plus/absolute return fixed income portfolio returned 0.1%, exceeding the benchmark return during the month by 0.2%. The intermediate corporate sector experienced the strongest performance for the period.

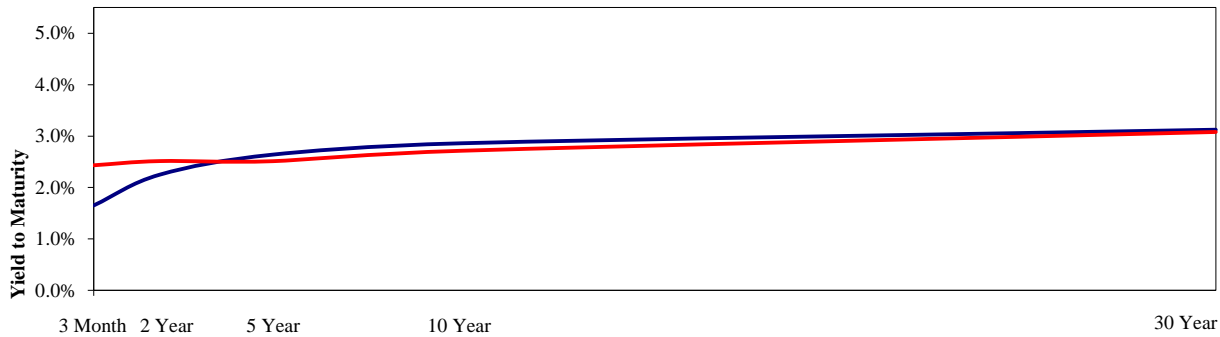
	February 2019	FYTD	1 YR	3 YR	5 YR	10 YR
SURS	0.1%	2.6%	3.2%	2.5%	2.4%	4.8%
Performance Benchmark	-0.1%	2.7%	3.2%	1.7%	2.3%	3.7%
Bloomberg Barclays U.S. Aggregate	-0.1%	2.7%	3.2%	1.7%	2.3%	3.7%
Bloomberg Barclays Universal	0.1%	3.0%	3.2%	2.5%	2.6%	4.3%
Long Term Government	-1.2%	0.7%	4.0%	-0.2%	4.5%	5.1%
Intermediate Government	-0.1%	2.5%	3.1%	0.6%	1.3%	2.0%
Long Term Corporate	-0.1%	3.0%	0.7%	5.5%	4.6%	8.6%
Intermediate Corporate	0.4%	3.6%	3.5%	3.0%	2.7%	5.5%
Mortgage Backed	-0.1%	2.7%	3.6%	1.4%	2.3%	3.1%
90-day Treasury Bills	0.2%	1.5%	2.1%	1.2%	0.7%	0.4%
3-month LIBOR	0.2%	1.6%	2.3%	1.4%	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 0.7%. 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 42 basis points on an annualized basis of 2.40% versus a required return of 1.98%.



US Treasury Yield Curve



	3 Month	2 Year	5 Year	10 Year	30 Year
2/28/2018	1.65%	2.25%	2.64%	2.86%	3.12%
2/28/2019	2.43%	2.51%	2.51%	2.72%	3.08%

Treasury Inflation-Protected Securities (TIPS)

The TIPS markets experienced flat results during February, returning 0.0% for the month. SURS portfolio performance matched the benchmark for the period, also returning 0.0%. SURS implemented a passive TIPS strategy in May 2017 to replace the active TIPS strategy in the investment portfolio.

	February 2019	FYTD	1 YR	3 YR	5 YR	10 YR
SURS	0.0%	0.1%	1.9%	1.9%	1.4%	4.3%
Custom Benchmark	0.0%	0.1%	1.9%	1.7%	1.5%	3.8%
Bloomberg Barclays U.S. TIPS Index	0.0%	0.1%	1.9%	1.7%	1.5%	3.8%
Bloomberg Barclays 1-10 year TIPS Index	0.1%	0.7%	2.2%	1.6%	1.1%	3.1%
90-day Treasury Bills	0.2%	1.5%	2.1%	1.2%	0.7%	0.4%

Emerging Market Debt (EMD)

The emerging market debt markets experienced flat results during February, returning 0.0% for the month. SURS portfolio performance outpaced the benchmark for the period, returning 0.1%. For the month, corporate securities and dollar denominated bonds outperformed local currency issues.

	February 2019	FYTD	1 YR	3 YR	5 YR	10 YR
SURS	0.1%	5.3%	-1.9%	7.5%	3.3%	3.3%
Custom Benchmark	0.0%	5.3%	-1.1%	6.8%	3.8%	3.8%
JPM CEMBI Broad	1.1%	5.4%	3.4%	6.7%	5.0%	5.0%
JPM EMBI Global Diversf	1.0%	6.5%	3.1%	6.4%	5.1%	5.1%
JPM GBI-EM Global Diversf	-1.1%	4.6%	-5.4%	6.8%	2.4%	2.4%

Real Estate

Real Estate Investment Trust Securities (REITs)

The global REIT markets experienced negative returns in February, returning -0.1%. SURS total REIT portfolio matched the index, also returning -0.1% for the month.

	February 2019	FYTD	1 YR	3 YR	5 YR	10 YR
SURS	-0.1%	4.9%	13.3%	8.1%	7.2%	16.7%
Custom Benchmark	-0.1%	4.1%	12.0%	7.7%	7.1%	16.7%
FTSE EPRA /NAREIT Developed Index	-0.1%	4.1%	12.0%	7.7%	5.7%	14.4%
FTSE EPRA /NAREIT Developed Ex-U.S	-0.7%	2.6%	4.0%	8.8%	4.4%	12.4%

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 December 31, 2018 was 8.4% as compared to its benchmark return of 7.7%.

	December 2018	FYTD	1 YR	3 YR	5 YR	10 YR
SURS	1.8%	1.8%	8.4%	8.3%	10.1%	6.7%
SURS Core Real Estate	1.6%	1.6%	7.4%	7.2%	8.8%	5.7%
SURS Non-Core Real Estate	2.1%	2.1%	10.6%	11.2%	13.6%	10.0%
NCREIF ODCE Index	1.9%	1.9%	7.7%	7.8%	9.7%	4.6%
Consumer Price Index	-0.5%	-0.3%	1.9%	2.0%	1.5%	1.9%

Hedged Strategies

Hedged strategies became a component of SURS portfolio in March 2016. The asset class experienced positive results during February, returning 1.0% for the month. SURS portfolio performance outperformed the benchmark for the period by 0.2%, returning 1.2%.

	February 2019	FYTD	1 YR	3 YR	5 YR	Since Inception
SURS	1.2%	-0.7%	0.0%	2.8%	2.8%	2.8%
Custom Benchmark	1.0%	2.1%	4.7%	5.6%	5.6%	5.6%
HFRI Fund of Funds Composite	1.1%	-1.2%	-1.2%	3.6%	3.6%	3.6%
HFRI Fund Weighted Composite	1.4%	-0.9%	-0.5%	4.7%	4.7%	4.7%

Commodities

SURS began investing in commodities in May 2016. Commodities experienced positive results during February, returning 1.0% for the month. SURS portfolio outperformed the benchmark for the period by 1.7%, returning 2.7%.

	February 2019	FYTD	1 YR	3 YR	5 YR	Since Inception
SURS	2.7%	-2.3%	-1.8%	3.0%	3.0%	3.0%
Custom Benchmark	1.0%	-5.5%	-5.7%	-0.4%	-0.4%	-0.4%

Commodities

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



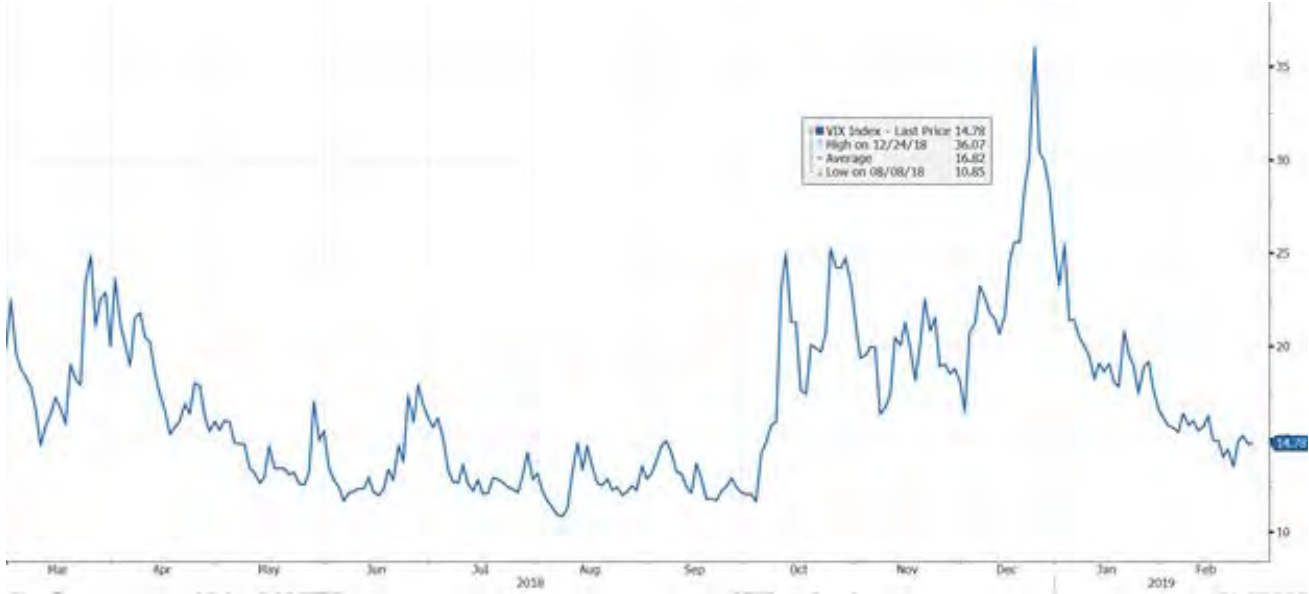
Source: Bloomberg. Calculations are as of the last monthly trading day. All data is as of February 28, 2019.

Opportunity Fund

The Opportunity Fund currently is comprised of an infrastructure portfolio that reports performance one quarter in arrears. The one-year return through December 31, 2018 was 2.9% versus its benchmark return of 7.5%.

	December 2018	FYTD	1 YR	3 YR	5 YR	10 YR
SURS	-0.3%	3.2%	2.9%	3.6%	5.0%	7.7%
Custom Benchmark	0.5%	3.7%	7.5%	7.2%	6.7%	6.1%

CBOE S&P 500 Volatility Index

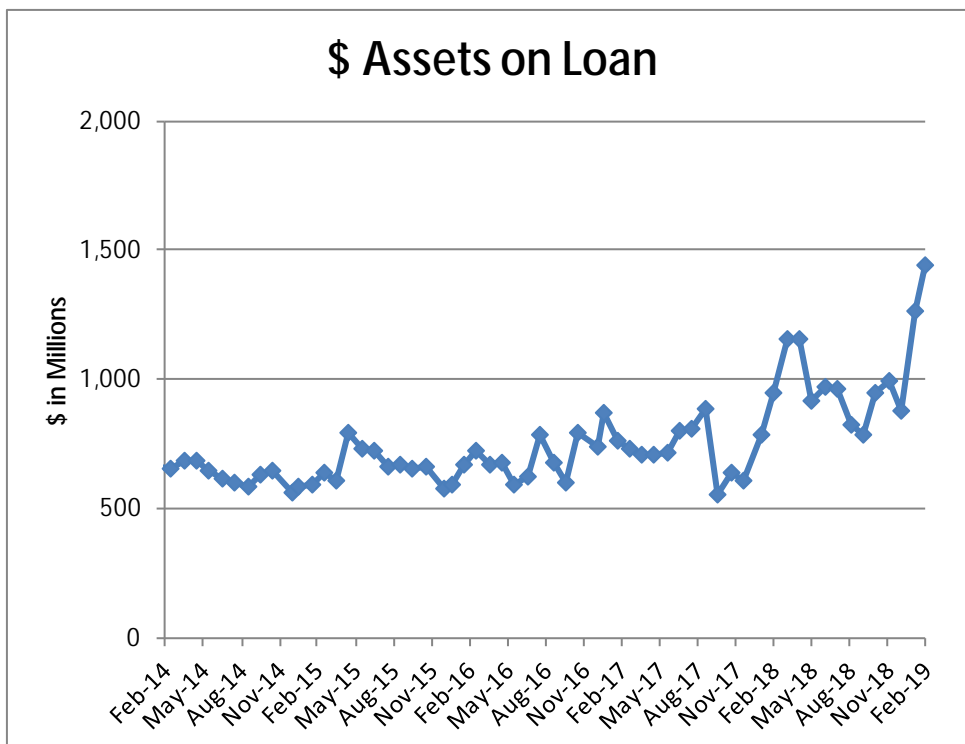


Source: Bloomberg. Calculations are as of the last monthly trading day. All data is as of February 28, 2019.

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 February and the 2019 fiscal year are as listed, below:

Securities Lending Income as of February 28, 2018	
Total for the Month	\$404,540
Fiscal Year to Date	\$2,880,883
Fiscal Year to Date Monthly Average	\$360,110



**Schedule of Self-Managed Plan Investment Allocation
as of February 28, 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>
Fidelity Investment Options						
Actively Managed						
Fidelity Managed Income Portfolio Class 2			61,198,438			61,198,438
PIMCO Total Return Institutional			43,843,784			43,843,784
Fidelity Puritan Class K				219,577,863		219,577,863
Ariel Fund Institutional	37,553,402					37,553,402
American Beacon Large Cap Value Inst.	14,211,991					14,211,991
Wells Fargo Small Company Growth R6	26,279,682					26,279,682
Fidelity Growth Company Commingled Pool	144,361,139					144,361,139
Fidelity Contrafund Commingled Pool	125,940,225					125,940,225
Fidelity Low-Priced Stock Class K	48,802,951					48,802,951
Fidelity Diversified International Pool		46,563,989				46,563,989
Fidelity Real Estate Investment					21,728,606	21,728,606
Passively Managed						
Fidelity U.S. Bond Index Inst Premium			43,023,278			43,023,278
Fidelity Freedom Index Funds - Inst Premium ⁽¹⁾				335,469,313		335,469,313
Fidelity Extended Market Index Inst Premium	52,776,241					52,776,241
Fidelity 500 Index Inst Premium	248,987,333					248,987,333
Fidelity Global ex-U.S. Index Inst Premium		32,630,524				32,630,524
Fidelity Total	698,912,964	79,194,513	148,065,500	555,047,176	21,728,606	1,502,948,759 61.4%
TIAA-CREF Investment Options						
Actively Managed						
CREF Money Market Account R3			6,008,104			6,008,104
Vanguard Federal Money Market Fund - Investor ⁽⁵⁾			14,845,421			14,845,421
TIAA Traditional Annuity			128,383,380			128,383,380
CREF Bond Market Account R3			54,225,552			54,225,552
CREF Inflation-Linked Bond Account R3			27,005,149			27,005,149
CREF Social Choice Account R3				56,257,850		56,257,850
CREF Growth Account R3 ⁽³⁾	591,853					591,853
CREF Stock Account R3	181,538,539					181,538,539
CREF Global Equities Account R3		63,681,519				63,681,519
Dimensional Target Date Ret Inc Fund - Inst ⁽²⁾				4,737,057		4,737,057
TIAA Real Estate Account					22,109,243	22,109,243
Passively Managed						
CREF Equity Index Account R3	97,900,552					97,900,552
TIAA-CREF Large-Cap Growth Index - Inst	139,850,636					139,850,636
TIAA-CREF Lifecycle Index Funds - Inst				146,119,054		146,119,054
TIAA-CREF Total	419,881,580	63,681,519	230,467,605	207,113,961	22,109,243	943,253,908 38.6%
GRAND TOTALS	<u>\$1,118,794,544</u> 45.7%	<u>\$142,876,032</u> 5.8%	<u>\$378,533,106</u> 15.5%	<u>\$762,161,137</u> 31.2%	<u>\$43,837,848</u> 1.8%	<u>\$2,446,202,668</u> 100.0%
SMP Forfeiture Reserve ⁽⁴⁾						19,503,828
SMP Disability Reserve ⁽⁴⁾						108,489,332
Total SMP Investments						<u>2,574,195,828</u>

- As of December 31, 2018, 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 December 31, 2018, 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.

SURS Private Equity Program Returns
Investment Values for Month Ended February 28, 2019
Investment Performance for Quarter Ended December 31, 2018 ⁽¹⁾

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 ⁽²⁾ Mgr	5 YR ⁽²⁾ Bmark	10 YR ⁽²⁾ Mgr	10 YR ⁽²⁾ Bmark	Incep ⁽²⁾ Mgr	Incep ⁽²⁾ Bmark
Adams Street Venture Partnerships (SEP)	Jan-91	DJ US Ttl Stk Mkt + 3%	34	2.49%	7.86%	2.49%	20.58%	11.39%	20.58%	10.93%	20.05%	7.64%	16.42%	7.37%	15.05%	28.16%	13.64%
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%	90	7.92%	7.86%	7.92%	20.58%	28.10%	20.58%	35.08%	20.05%	35.08%	15.98%	35.08%	15.98%	35.08%	15.98%
Adams Street 2014 Global Fund (FOF)	May-14	DJ US Ttl Stk Mkt + 3%	92	7.48%	7.86%	7.48%	20.58%	23.38%	20.58%	16.19%	20.05%	14.72%	15.31%	14.72%	15.31%	14.72%	15.31%
Adams Street 2013 Global Fund (FOF)	Mar-13	DJ US Ttl Stk Mkt + 3%	95	6.42%	7.86%	6.42%	20.58%	21.93%	20.58%	14.64%	20.05%	13.15%	16.42%	12.84%	17.49%	12.84%	17.49%
Adams Street 2012 Global Fund (FOF)	Apr-12	DJ US Ttl Stk Mkt + 3%	75	4.06%	7.86%	4.06%	20.58%	16.91%	20.58%	12.57%	20.05%	11.54%	16.42%	10.89%	17.01%	10.89%	17.01%
Adams Street 2009 Global Offering (FOF)	Jan-09	DJ US Ttl Stk Mkt + 3%	95	3.18%	7.86%	3.18%	20.58%	17.97%	20.58%	12.97%	20.05%	14.48%	16.42%	13.35%	18.41%	13.35%	18.41%
Adams Street 2008 Global Offering (FOF)	Jan-08	DJ US Ttl Stk Mkt + 3%	87	5.02%	7.86%	5.02%	20.58%	20.29%	20.58%	14.78%	20.05%	17.30%	16.42%	14.61%	15.05%	14.18%	12.05%
Adams Street Global Opportunities Secondary Fund - 2004 (FOF)	Mar-04	DJ US Ttl Stk Mkt + 3%	5	3.18%	7.86%	3.18%	20.58%	18.45%	20.58%	15.64%	20.05%	12.48%	16.42%	9.96%	15.05%	11.49%	12.14%
Adams Street 2007 Global Opportunities Portfolio (FOF)	Jun-07	DJ US Ttl Stk Mkt + 3%	39	2.84%	7.86%	2.84%	20.58%	7.07%	20.58%	7.41%	20.05%	8.66%	16.42%	10.07%	15.05%	8.31%	11.23%
Adams Street Global Secondary Fund 5 - 2012 (FOF)	Oct-12	DJ US Ttl Stk Mkt + 3%	14	1.28%	7.86%	1.28%	20.58%	8.36%	20.58%	10.43%	20.05%	6.97%	16.42%	6.82%	17.72%	6.82%	17.72%
Adams Street 2004 Non-U.S. Fund (FOF)	Jul-98	DJ US Ttl Stk Mkt + 3%	8	-0.58%	7.86%	-0.58%	20.58%	7.92%	20.58%	5.37%	20.05%	4.95%	16.42%	3.52%	15.05%	11.70%	10.16%
Total Adams Street Partners	Jan-91		747														
Lincoln Fund I (FOF)	Apr-14	DJ US Ttl Stk Mkt + 3%	57	3.24%	7.86%	3.24%	20.58%	15.34%	20.58%	11.08%	20.05%	9.48%	15.09%	9.48%	15.09%	9.48%	15.09%
Total Fairview Capital Partners	Apr-14		57														
Mesirow Financial Private Equity Fund VII-B	Jan-18	DJ US Ttl Stk Mkt + 3%	14	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
Total Mesirow Private Equity	Jan-18		29														
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 ² Private Equity Fund of Funds (FOF)	Mar-08	DJ US Ttl Stk Mkt + 3%	7	-1.77%	7.86%	-1.77%	20.58%	6.41%	20.58%	6.38%	20.05%	13.77%	16.42%	10.56%	15.05%	8.98%	13.16%
Total Muller and Monroe	Dec-04		58														
Pantheon Ventures, Inc. (SEP)	Mar-02	DJ US Ttl Stk Mkt + 3%	77	0.38%	7.86%	0.38%	20.58%	1.54%	20.58%	4.64%	20.05%	7.20%	16.42%	8.27%	15.05%	10.50%	11.72%
Pantheon Europe Fund III - 2003 (FOF)	Jan-03	DJ US Ttl Stk Mkt + 3%	11	42.27%	7.86%	42.27%	20.58%	29.40%	20.58%	13.46%	20.05%	8.55%	16.42%	6.72%	15.05%	14.73%	13.60%
Pantheon Europe Fund VI - 2008 (FOF)	Sep-08	DJ US Ttl Stk Mkt + 3%	25	3.86%	7.86%	3.86%	20.58%	18.81%	20.58%	16.10%	20.05%	12.07%	16.42%	9.94%	15.05%	9.58%	13.86%
Pantheon Europe Fund VII - 2013 (FOF)	Jan-13	DJ US Ttl Stk Mkt + 3%	32	0.88%	7.86%	0.88%	20.58%	15.46%	20.58%	16.64%	20.05%	11.54%	16.42%	11.07%	18.37%	11.07%	18.37%
Pantheon Global Secondary Fund II - 2004 (FOF)	Mar-04	DJ US Ttl Stk Mkt + 3%	3	-1.24%	7.86%	-1.24%	20.58%	-18.66%	20.58%	-2.78%	20.05%	0.07%	16.42%	-3.08%	15.05%	3.62%	12.14%
Pantheon Multi-Strategy Program 2014 (US), L.P.	Feb-15	DJ US Ttl Stk Mkt + 3%	64	3.09%	7.86%	3.09%	20.58%	15.96%	20.58%	13.98%	20.05%	12.68%	15.87%	12.68%	15.87%	12.68%	15.87%
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 USA Fund VIII - 2008 (FOF)	Jan-08	DJ US Ttl Stk Mkt + 3%	92	3.72%	7.86%	3.72%	20.58%	19.75%	20.58%	15.71%	20.05%	14.97%	16.42%	13.08%	15.05%	12.69%	12.05%
Pantheon USA Fund IX - 2013 (FOF)	Jan-13	DJ US Ttl Stk Mkt + 3%	90	4.90%	7.86%	4.90%	20.58%	22.60%	20.58%	15.51%	20.05%	14.43%	16.42%	14.21%	18.37%	14.21%	18.37%
Total Pantheon Ventures, Inc.	Mar-02		404														
Total Private Equities	Jan-91	DJ US Ttl Stk Mkt + 3%	1,295	4.51%	7.86%	4.51%	20.58%	16.82%	20.58%	12.47%	20.05%	11.21%	16.42%	9.02%	15.05%	20.38%	13.64%

(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 February 28, 2019**

Manager	Incep ⁽¹⁾	Benchmark	Assets (\$mil)	% Fund	Month Mgr	Month 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	Incep ⁽²⁾ Mgr	Incep ⁽²⁾ Bmark
PROGRESS TOTAL FUND	May-08		501	100.0%	1.1%		0.8%		-1.2%		6.9%		3.1%		5.3%	
Non-U.S. Equity																
Affinity Investment Advisors	Jun-15	MSCI EAFE	32	6.4%	2.0%	2.5%	-6.7%	-3.1%	-8.6%	-6.0%	9.6%	9.3%	2.9%	3.1%	2.9%	3.1%
Arga Investment Management	Sep-16	MSCI EAFE	42	8.5%	2.4%	2.5%	-1.3%	-3.1%	-5.4%	-6.0%	7.4%	6.7%	7.4%	6.7%	7.4%	6.7%
Brown Capital Management	May-08	MSCI EAFE	35	7.0%	1.9%	2.5%	-3.9%	-3.1%	-1.7%	-6.0%	7.7%	9.3%	3.7%	2.1%	4.7%	1.6%
Denali	Apr-17	MSCI EAFE	25	5.1%	0.7%	2.5%	-0.4%	-3.1%	-5.2%	-6.0%	5.5%	3.8%	5.5%	3.8%	5.5%	3.8%
Solstein Capital	Oct-17	MSCI EAFE	21	4.2%	2.6%	2.5%	-3.5%	-3.1%	-4.2%	-6.0%	0.0%	-2.5%	0.0%	-2.5%	0.0%	-2.5%
Strategic Global Advisors	May-08	MSCI EAFE	62	12.3%	2.0%	2.5%	-1.4%	-3.1%	-6.4%	-6.0%	10.6%	9.3%	4.9%	2.1%	4.9%	1.6%
TOTAL NON-U.S. EQUITY	May-08	MSCI EAFE	218	43.4%	1.9%	2.5%	-2.7%	-3.1%	-5.4%	-6.0%	10.4%	9.3%	2.5%	2.1%	2.9%	1.6%
Core Fixed Income																
GIA Partners	Jul-14	Bloomberg Barclays U.S. Aggr	38	7.7%	0.2%	-0.1%	2.6%	2.7%	2.3%	3.2%	3.0%	1.7%	2.5%	2.2%	2.5%	2.2%
Integrity Fixed Income	Oct-17	Bloomberg Barclays U.S. Aggr	28	5.7%	0.0%	-0.1%	2.5%	2.7%	2.8%	3.2%	0.9%	1.0%	0.9%	1.0%	0.9%	1.0%
New Century Advisors	May-08	Bloomberg Barclays U.S. Aggr	45	9.0%	-0.1%	-0.1%	2.5%	2.7%	2.8%	3.2%	1.8%	1.7%	2.1%	2.3%	3.9%	3.6%
Ramirez Asset Management	May-13	Bloomberg Barclays U.S. Aggr	38	7.6%	0.2%	-0.1%	2.6%	2.7%	2.9%	3.2%	2.6%	1.7%	2.7%	2.3%	2.5%	2.2%
TOTAL Core Fixed Income	May-08	Bloomberg Barclays U.S. Aggr	150	30.0%	0.1%	-0.1%	2.4%	2.7%	2.5%	3.2%	2.2%	1.7%	2.4%	2.3%	4.0%	3.6%
Emerging Market Debt																
GIA Partners	Apr-15	JPM CEMBI Broad	79	15.7%	1.1%	1.1%	5.5%	5.4%	1.8%	3.4%	8.1%	6.7%	4.8%	4.6%	4.8%	4.6%
LM Capital Group	Apr-15	JPM CEMBI Broad	54	10.9%	1.0%	1.1%	4.7%	5.4%	2.7%	3.4%	7.0%	6.7%	4.2%	4.6%	4.2%	4.6%
TOTAL Emerging Market Debt	Apr-15	JPM CEMBI Broad	133	26.6%	1.0%	1.1%	5.2%	5.4%	2.2%	3.4%	7.5%	6.7%	4.4%	4.6%	4.4%	4.6%

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

SURS Manager Diversity Program Returns
Investment Performance for Month Ended February 28, 2018

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
TOTAL MDP	Jan-05	Policy Portfolio	3,462	2.0%	2.3%	2.3%	2.4%	-0.3%	1.0%	-0.4%	1.3%	8.7%	9.3%	5.2%	5.1%	6.0%	6.0%
U.S. Equity: Active																	
Matarin Capital	Jan-18	Russell 2000	96	3.8%	5.2%	1.8%	3.1%	-7.3%	-3.3%	0.0%	5.6%	-4.0%	1.5%	-4.0%	1.5%	-4.0%	1.5%
Channing SMID Value	Jan-18	Russell 2500 Value	92	4.4%	3.1%	2.2%	2.0%	-5.3%	-2.4%	-2.8%	4.4%	-7.7%	-0.8%	-7.7%	-0.8%	-7.7%	-0.8%
EARNEST Partners	Jun-11	Russell Midcap	163	4.6%	4.3%	4.9%	4.1%	2.9%	2.7%	3.7%	5.6%	17.4%	14.5%	10.2%	8.6%	11.9%	11.2%
Denali Advisors	Dec-17	Russell 1000 Value	48	2.1%	3.2%	-0.1%	0.5%	-0.5%	3.8%	-2.6%	3.2%	-3.4%	1.7%	-3.4%	1.7%	-3.4%	1.7%
Gladius - US Equity	Dec-16	Russell 3000	435	3.4%	3.5%	-2.3%	1.9%	-1.5%	3.2%	1.3%	5.0%	10.1%	12.5%	10.1%	12.5%	10.1%	12.5%
Piedmont Investment Advisors	Jul-14	S&P 500	664	3.6%	3.2%	1.7%	1.4%	3.2%	3.8%	3.4%	4.7%	16.3%	15.3%	10.9%	10.1%	10.9%	10.1%
Composite, Active U.S. Equity	Apr-05	Blended	1,498	3.7%	3.3%	0.8%	1.9%	0.4%	2.5%	2.2%	4.7%	14.6%	15.3%	8.8%	8.5%	9.1%	9.0%
TOTAL U.S. Equity	Jan-05	Blended	1,498	3.7%	3.3%	0.8%	1.9%	0.4%	2.5%	2.2%	4.7%	14.6%	15.3%	8.8%	8.5%	8.5%	8.7%
Non-U.S. Equity																	
Ativo Capital Management	Jul-08	MSCI ACWI Ex-U.S.	278	1.0%	2.0%	4.8%	4.7%	-2.4%	-2.2%	-4.9%	-6.5%	7.5%	10.7%	2.4%	2.5%	3.6%	2.5%
GlobeFlex Capital	Jul-14	MSCI ACWI Ex-U.S.	304	0.8%	2.0%	4.8%	4.7%	-7.2%	-2.2%	-11.9%	-6.5%	9.8%	10.7%	2.2%	1.5%	2.2%	1.5%
Strategic Global Advisors	Aug-08	MSCI EAFE	324	2.0%	2.5%	5.2%	4.0%	-2.9%	-3.1%	-6.3%	-6.0%	8.5%	9.3%	3.8%	2.1%	5.9%	3.1%
TOTAL Non-U.S. Equity	Aug-06	Blended	907	1.3%	2.2%	4.9%	4.4%	-4.2%	-2.5%	-7.9%	-6.3%	8.6%	10.2%	2.5%	2.2%	3.7%	2.7%
Private Equity																	
Fairview Lincoln Fund I	Apr-14	DJ U.S. Total Stk Mkt + 3% (1)	57	3.2%	7.9%	3.2%	7.9%	3.2%	7.9%	15.3%	20.6%	11.1%	20.1%	9.5%	15.1%	9.5%	15.1%
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	-1.8%	7.9%	-1.8%	7.9%	-1.8%	7.9%	6.4%	20.6%	6.4%	20.1%	13.8%	16.4%	9.0%	13.2%
TOTAL Private Equity	Dec-04	DJ U.S. Total Stk Mkt + 3% (1)	115	5.1%	7.9%	5.1%	7.9%	5.1%	7.9%	13.7%	20.6%	7.3%	20.1%	8.3%	16.4%	5.4%	12.3%
Fixed Income: Core																	
Garcia Hamilton	Feb-09	Bloomberg Barclays U.S. Aggregate	322	0.0%	-0.1%	2.2%	2.9%	2.0%	2.7%	3.2%	3.2%	1.8%	1.7%	2.9%	2.3%	5.2%	3.7%
LM Capital Group	Dec-10	Bloomberg Barclays U.S. Aggregate	166	0.2%	-0.1%	3.0%	2.9%	2.6%	2.7%	2.1%	3.2%	1.9%	1.7%	2.4%	2.3%	3.1%	2.9%
Pugh Capital Management	Apr-06	Bloomberg Barclays U.S. Aggregate	166	-0.1%	-0.1%	2.8%	2.9%	2.5%	2.7%	2.8%	3.2%	1.7%	1.7%	2.3%	2.3%	4.5%	4.1%
Smith Graham & Company	Apr-06	Bloomberg Barclays U.S. Aggregate	107	0.1%	-0.1%	2.9%	2.9%	2.8%	2.7%	2.6%	3.2%	1.7%	1.7%	2.3%	2.3%	4.2%	4.1%
Composite, Core Fixed Inc	Apr-06	Bloomberg Barclays U.S. Aggregate	762	0.0%	-0.1%	2.6%	2.9%	2.4%	2.7%	2.8%	3.2%	1.8%	1.7%	2.5%	2.3%	4.4%	4.1%
TOTAL Fixed Income	Apr-06	Blended	762	0.0%	-0.1%	2.6%	2.9%	2.4%	2.7%	2.8%	3.2%	1.8%	1.8%	2.1%	2.1%	4.2%	4.0%
Real Estate																	
Franklin Templeton EMREFF	Aug-11	NCREIF ODCE Index + 1.5% (1)	31	1.2%	2.2%	1.2%	2.2%	1.2%	2.2%	14.4%	9.2%	14.6%	9.3%	16.0%	11.2%	14.8%	11.9%
Frnkln Templeton MDP RE 2015	Sep-15	NCREIF ODCE Index + 1.5% (1)	41	-2.1%	2.2%	-2.1%	2.2%	-2.1%	2.2%	0.1%	9.2%	-2.3%	9.3%	-2.3%	9.3%	-2.3%	9.3%
Basis Real Estate Fund I	Jan-18	NCREIF ODCE Index + 1.5% (1)	11	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
TOTAL Real Estate	Aug-11	NCREIF ODCE Index + 1.5% (1)	83	1.2%	2.2%	1.2%	2.2%	1.2%	2.2%	14.4%	9.2%	14.6%	9.3%	16.0%	11.2%	14.8%	11.9%
Hedge Funds - Options																	
Gladius - Options	May-18	Blended	98	1.4%	1.3%	0.0%	-0.3%	-2.7%	-1.9%	-2.6%	-2.4%	-2.6%	-2.4%	-2.6%	-2.4%	-2.6%	-2.4%
TOTAL Hedge Funds	May-18	Blended	98	1.4%	1.3%	0.0%	-0.3%	-2.7%	-1.9%	-2.6%	-2.4%	-2.6%	-2.4%	-2.6%	-2.4%	-2.6%	-2.4%

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	\$ 1,498	43.3%
Private Equity	115	3.3%
Non-U.S. Equity	907	26.2%
Global Equity	-	0.0%
Fixed Income	762	22.0%
TIPS	-	0.0%
Real Estate	83	2.4%
Hedge Funds	98	2.8%
Total Fund	\$ 3,462	100.0%

**SURS Defined Benefit Portfolio
Investment Performance**

February-19	Incep ⁽¹⁾	Benchmark	\$ millions	% Fund	02/2019 Mgr	02/2019 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
U.S. Equities																
CastleArk Management	Sep-12	Russell 2000 Growth	116	0.6%	6.74%	6.46%	7.63%	-1.82%	20.12%	6.70%	21.64%	18.27%	8.56%	8.16%	15.32%	13.38%
Matarin Capital	Jan-18	Russell 2000	96	0.5%	3.78%	5.20%	-7.31%	-3.27%	0.03%	5.58%	-4.03%	1.38%	-4.03%	1.38%	-4.03%	1.38%
Mesirow Financial Investment Mgmt	May-11	Russell 2000	180	0.9%	4.76%	5.20%	-4.68%	-3.27%	0.08%	5.58%	11.24%	16.67%	5.73%	7.36%	8.09%	9.83%
Channing SMID Value	Jan-18	Russell 2500 Value	92	0.5%	4.37%	3.12%	-5.27%	-2.44%	-2.82%	4.35%	-7.72%	-0.71%	-7.72%	-0.71%	-7.72%	-0.71%
EARNEST Partners	Jun-11	Russell Midcap	163	0.9%	4.64%	4.30%	2.85%	2.67%	3.74%	5.63%	17.38%	14.46%	10.19%	8.56%	11.95%	11.18%
Denali Advisors	Dec-17	Russell 1000 Value	48	0.3%	2.09%	3.20%	-0.54%	3.79%	-2.63%	3.16%	-3.38%	1.74%	-3.38%	1.74%	-3.38%	1.74%
Gladius	Dec-16	Russell 3000	435	2.3%	3.39%	3.52%	-1.49%	3.19%	1.31%	5.05%	10.14%	12.48%	10.14%	12.48%	10.14%	12.48%
<i>Active U.S. Equities</i>	Oct-81	Blended	1,129	5.9%	4.18%	4.29%	-1.36%	0.56%	2.59%	4.97%	13.74%	12.99%	6.97%	6.57%	15.41%	6.41%
Piedmont Investment Advisors	Jan-08	S&P 500	664	3.5%	3.58%	3.21%	3.20%	3.84%	3.38%	4.68%	16.26%	15.28%	11.54%	10.67%	16.76%	16.67%
T. Rowe Price	Mar-08	S&P 500	431	2.3%	3.00%	3.21%	3.63%	3.84%	4.83%	4.68%	16.15%	15.28%	11.12%	10.67%	16.92%	16.67%
<i>Structured Active U.S. *</i>	Oct-87	Blended	1,095	5.7%	3.35%	3.21%	3.37%	3.84%	3.94%	4.68%	16.23%	15.28%	11.01%	10.67%	18.48%	16.67%
Northern Trust Asset Management	Feb-99	Dow Jones U.S. Total Stock Market	1,235	6.5%	3.51%	3.51%	3.19%	3.12%	5.04%	4.99%	15.57%	15.50%	10.12%	10.09%	16.86%	16.81%
RhumbLine Advisors	Feb-05	Custom / Wilshire 5000	1,032	5.4%	3.47%	3.47%	3.43%	3.36%	5.18%	5.06%	15.53%	15.63%	10.42%	10.35%	16.72%	16.80%
<i>Passive U.S. Equities</i>	Jul-86	Blended	2,267	11.9%	3.49%	3.49%	3.29%	3.22%	5.08%	5.03%	15.56%	15.55%	10.24%	10.20%	16.80%	16.83%
Total U.S. Equities	Oct-81	Dow Jones U.S. Total Stock Market	4,492	23.5%	3.63%	3.51%	2.12%	3.12%	4.20%	4.99%	15.22%	15.50%	9.72%	10.09%	17.00%	16.81%
Non-U.S. Equities																
Ativo Capital Management	Jul-08	MSCI ACWI Ex-US	278	1.5%	0.99%	1.95%	-2.41%	-2.23%	-4.93%	-6.46%	7.47%	10.72%	2.41%	2.50%	11.05%	9.63%
GlobeFlex Capital	Dec-11	MSCI ACWI Ex-US	304	1.6%	0.77%	1.95%	-7.20%	-2.23%	-11.94%	-6.46%	9.82%	10.72%	3.39%	2.50%	7.81%	5.85%
Progress Investment	May-08	MSCI EAFE	218	1.1%	1.95%	2.55%	-2.68%	-3.12%	-5.44%	-6.04%	10.39%	9.32%	2.52%	2.07%	10.74%	9.56%
Strategic Global Advisors	Aug-08	MSCI EAFE	324	1.7%	1.96%	2.55%	-2.91%	-3.12%	-6.25%	-6.04%	8.54%	9.32%	3.78%	2.07%	12.88%	9.56%
<i>Active Non U.S. Equities</i>	Jul-92	Blended	1,124	5.9%	1.39%	2.24%	-3.95%	-2.66%	-7.40%	-6.27%	8.95%	10.05%	2.61%	1.60%	9.61%	26.76%
BTC International Alpha Tilts	Nov-03	MSCI EAFE	512	2.7%	1.80%	2.55%	-4.71%	-3.12%	-7.56%	-6.04%	10.11%	9.32%	3.07%	2.07%	10.92%	9.56%
Fidelity Institutional Asset Mgmt	Dec-11	MSCI ACWI Ex-US	561	2.9%	2.37%	1.95%	-3.16%	-2.23%	-7.88%	-6.46%	9.42%	10.72%	2.28%	2.50%	6.07%	5.85%
<i>Structured Active Non U.S. *</i>	Nov-03	Blended	1,074	5.6%	2.10%	2.24%	-3.91%	-2.65%	-7.73%	-6.26%	9.74%	10.04%	2.65%	2.29%	9.94%	9.21%
BTC Emerging Markets	Oct-09	MSCI Emerging Markets	367	1.9%	0.20%	0.22%	-0.30%	-0.24%	-9.96%	-9.89%	14.85%	15.04%	3.98%	4.13%	3.72%	3.92%
BTC International	Jul-86	MSCI ACWI Ex-US	1,085	5.7%	1.95%	1.95%	-2.14%	-2.23%	-6.09%	-6.46%	11.13%	10.72%	2.96%	2.50%	10.08%	9.63%
<i>Passive Non U.S. Equities</i>	Jul-86	Blended / MSCI ACWI Ex-US	1,452	7.6%	1.50%	1.51%	-1.63%	-1.62%	-6.68%	-6.91%	11.63%	11.33%	3.05%	2.74%	9.92%	9.61%
Total Non U.S. Equities	Jul-86	MSCI ACWI Ex-US	3,650	19.1%	1.64%	1.95%	-3.02%	-2.23%	-7.17%	-6.46%	10.33%	10.72%	2.82%	2.50%	9.68%	9.63%
Global Equities																
Mondrian Investment Partners	Dec-11	MSCI ACWI	565	3.0%	3.26%	2.67%	3.93%	0.79%	0.43%	-0.84%	12.29%	12.87%	6.03%	6.28%	8.68%	9.59%
T. Rowe Price Global Focused Growth	Oct-08	MSCI ACWI	609	3.2%	3.26%	2.67%	2.82%	0.79%	4.82%	-0.84%	20.53%	12.87%	12.07%	6.28%	16.64%	12.73%
Wellington Management	Jun-02	Custom / MSCI ACWI	582	3.0%	3.48%	2.67%	0.77%	0.79%	0.13%	-0.84%	14.02%	12.87%	7.38%	6.28%	14.61%	12.73%
Total Global Equities	Jan-04	Blended / MSCI ACWI	1,756	9.2%	3.33%	2.67%	2.46%	0.79%	1.89%	-0.84%	15.66%	12.87%	8.18%	6.28%	13.87%	12.73%
* 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**

February-19	Incep (1)	Benchmark	\$ millions	% Fund	02/2019 Mgr	02/2019 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
Private Equities																
Adams Street Partners	Jan-91	DJ U.S. Total Stock Market + 3% (3)	747	3.9%	5.13%	7.86%	5.13%	7.86%	19.11%	20.58%	13.95%	20.05%	12.27%	16.42%	9.43%	15.05%
Fairview Capital Partners	Apr-14	DJ U.S. Total Stock Market + 3% (3)	57	0.3%	3.24%	7.86%	3.24%	7.86%	15.34%	20.58%	11.08%	20.05%	9.48%	15.09%	9.48%	15.09%
Mesirow Private Equity	Jan-18	DJ U.S. Total Stock Market + 3% (3)	29	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%	7.36%	7.86%	7.36%	7.86%	11.87%	20.58%	2.71%	20.05%	7.31%	16.42%	6.15%	15.05%
Pantheon Ventures, Inc.	Mar-02	DJ U.S. Total Stock Market + 3% (3)	404	2.1%	3.38%	7.86%	3.38%	7.86%	13.87%	20.58%	11.20%	20.05%	10.26%	16.42%	8.75%	15.05%
Total Private Equities	Jan-91	DJ U.S. Total Stock Market + 3% (3)	1,295	6.8%	4.51%	7.86%	4.51%	7.86%	16.82%	20.58%	12.47%	20.05%	11.21%	16.42%	9.02%	15.05%
TOTAL EQUITIES																
TOTAL EQUITIES	Oct-81	Blended	11,194	58.6%	2.49%	2.53%	1.19%	2.20%	1.12%	2.18%	13.51%	14.16%	7.43%	7.94%	13.33%	14.26%
Fixed Income																
Cash Flow	Oct-81	90-day T-bills	266	1.4%	0.36%	0.20%	3.13%	1.52%	4.53%	2.14%	2.12%	1.20%	1.33%	0.75%	0.77%	0.42%
<i>Core Fixed Income Managers</i>																
Garcia Hamilton & Associates	Feb-09	Bloomberg Barclays U.S. Aggregate	322	1.7%	0.00%	-0.06%	2.04%	2.67%	3.18%	3.17%	1.80%	1.69%	2.92%	2.32%	5.18%	3.71%
Progress Investment	May-08	Bloomberg Barclays U.S. Aggregate	150	0.8%	0.08%	-0.06%	2.42%	2.67%	2.55%	3.17%	2.16%	1.69%	2.36%	2.32%	4.22%	3.71%
Pugh Capital Management	Apr-06	Bloomberg Barclays U.S. Aggregate	166	0.9%	-0.06%	-0.06%	2.53%	2.67%	2.77%	3.17%	1.70%	1.69%	2.34%	2.32%	4.20%	3.71%
Smith Graham & Company	Apr-06	Bloomberg Barclays U.S. Aggregate	107	0.6%	0.05%	-0.06%	2.81%	2.67%	2.64%	3.17%	1.67%	1.69%	2.34%	2.32%	4.13%	3.71%
<i>Core Plus Fixed Income Managers</i>																
LM Capital Group	Dec-10	Bloomberg Barclays U.S. Aggregate	166	0.9%	0.18%	-0.06%	2.61%	2.67%	2.13%	3.17%	1.90%	1.69%	2.45%	2.32%	3.15%	2.87%
Neuberger Berman	Dec-10	Bloomberg Barclays U.S. Aggregate	356	1.9%	0.17%	-0.06%	3.27%	2.67%	2.82%	3.17%	3.13%	1.69%	2.75%	2.32%	3.58%	2.87%
PIMCO Total Return	Oct-81	Bloomberg Barclays U.S. Aggregate	407	2.1%	-0.04%	-0.06%	2.57%	2.67%	3.52%	3.17%	2.67%	1.69%	2.33%	2.32%	5.31%	3.71%
TCW MetWest	Nov-01	Bloomberg Barclays U.S. Aggregate	560	2.9%	0.00%	-0.06%	2.74%	2.67%	3.50%	3.17%	2.11%	1.69%	2.55%	2.32%	6.20%	3.71%
<i>Active Fixed Income</i>																
State Street Global Advisors	Sep-10	Bloomberg Barclays U.S. Aggregate	552	2.9%	-0.06%	-0.06%	2.70%	2.67%	3.20%	3.17%	1.70%	1.69%	2.33%	2.32%	2.63%	2.62%
<i>Passive Fixed Income</i>																
PIMCO Unconstrained	May-13	LIBOR + 3%	502	2.6%	0.33%	0.49%	2.67%	3.63%	3.29%	5.33%	5.47%	4.41%	2.79%	3.95%	2.35%	3.86%
<i>Absolute Return Fixed Income</i>																
Total Core Fixed Income	Oct-81	Bloomberg Barclays U.S. Aggregate	3,555	18.6%	0.09%	-0.06%	2.64%	2.67%	3.20%	3.17%	2.51%	1.69%	2.40%	2.32%	4.84%	3.71%
TIPS																
RhumbLine TIPS	May-17	Bloomberg Barclays U.S. TIPS	695	3.6%	-0.04%	-0.01%	0.08%	0.08%	1.88%	1.91%	0.69%	0.70%	0.69%	0.70%	0.69%	0.70%
Total TIPS	Jul-04	Bloomberg Barclays U.S. TIPS (4)	695	3.6%	-0.04%	-0.01%	0.08%	0.08%	1.88%	1.91%	1.91%	1.69%	1.37%	1.47%	4.29%	3.81%
Emerging Market Debt																
Colchester Local Markets Debt Fund	Apr-15	JPM GBI-EM Global Diversif unhedged	143	0.7%	-1.00%	-1.09%	4.81%	4.56%	-4.25%	-5.38%	9.84%	6.77%	2.29%	1.70%	2.29%	1.70%
Progress Investment	Apr-15	JPM Corp Em Mkts Bond Index-Broad	133	0.7%	1.05%	1.11%	5.20%	5.43%	2.16%	3.42%	7.49%	6.74%	4.43%	4.57%	4.43%	4.57%
Prudential Emerging Mkts Debt Blend	Jun-15	Custom	318	1.7%	0.24%	-0.05%	5.52%	5.59%	-2.49%	-1.18%	7.66%	6.68%	5.18%	4.29%	5.18%	4.29%
Total Emerging Market Debt	Mar-15	Custom	595	3.1%	0.12%	-0.02%	5.28%	5.33%	-1.93%	-1.07%	7.51%	6.78%	3.34%	3.82%	3.34%	3.82%
TOTAL FIXED INCOME																
TOTAL FIXED INCOME	Oct-81	Custom	4,844	25.4%	0.07%	0.01%	2.57%	2.72%	2.37%	2.73%	3.00%	2.44%	2.37%	2.59%	4.84%	4.23%

**SURS Defined Benefit Portfolio
Investment Performance**

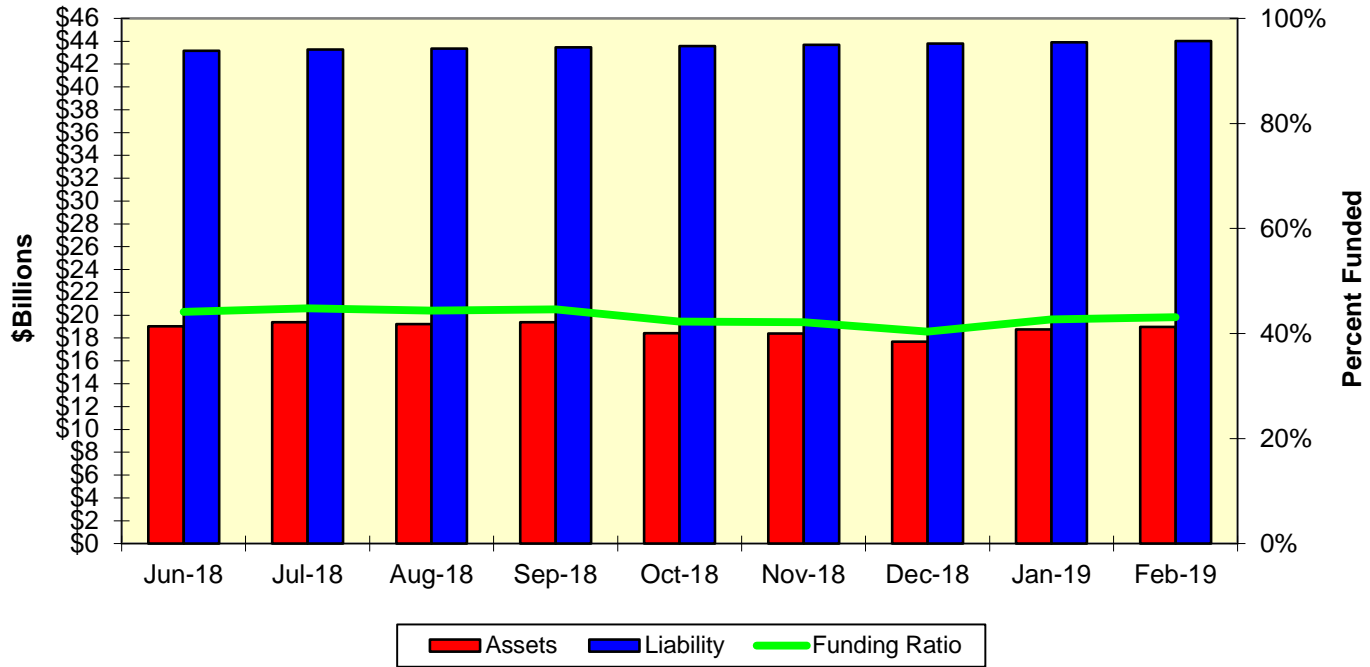
February-19	Incep (1)	Benchmark	\$ millions	% Fund	02/2019 Mgr	02/2019 Bmark	FYTD Mgr	FYTD Bmark	1 YR (2) Mgr	1 YR (2) Bmark	3 YR (2) Mgr	3 YR (2) Bmark	5 YR (2) Mgr	5 YR (2) Bmark	10 YR (2) Mgr	10 YR (2) Bmark
Real Estate																
<i>Core Direct Real Estate Managers</i>																
Heitman America Real Estate Trust	Jul-14	NCREIF ODCE Index (3)	220	1.1%	2.04%	1.87%	2.04%	1.87%	8.07%	7.71%	8.41%	7.83%	9.83%	9.49%	9.83%	9.49%
JPMCB Strategic Property Fund	Jun-14	NCREIF ODCE Index (3)	224	1.2%	1.53%	1.87%	1.53%	1.87%	7.00%	7.71%	7.44%	7.83%	9.15%	9.97%	9.15%	9.97%
UBS Trumbull Property Fund	Jun-06	NCREIF ODCE Index (3)	127	0.7%	1.21%	1.87%	1.21%	1.87%	7.10%	7.71%	6.43%	7.83%	8.24%	9.71%	6.36%	4.64%
<i>Core Plus Direct Real Estate Managers</i>																
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)	6	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%	2.10%	2.24%	2.10%	2.24%	10.33%	9.21%	10.83%	9.33%	13.84%	11.21%	16.40%	9.35%
Dune Real Estate Fund III	Jul-13	NCREIF ODCE Index + 1.5% (3)	132	0.7%	5.54%	2.24%	5.54%	2.24%	13.50%	9.21%	13.68%	9.33%	13.79%	11.42%	13.26%	11.42%
Franklin Templeton EMREFF	Aug-11	NCREIF ODCE Index + 1.5% (3)	31	0.2%	1.24%	2.24%	1.24%	2.24%	14.40%	9.21%	14.57%	9.33%	15.99%	11.21%	14.75%	11.90%
Franklin Templeton FTPREF	Jun-12	NCREIF ODCE Index + 1.5% (3)	16	0.1%	-4.90%	2.24%	-4.90%	2.24%	9.00%	9.21%	14.34%	9.33%	24.39%	11.21%	20.91%	11.86%
Franklin Templeton MDP RE 2015	Sep-15	NCREIF ODCE Index + 1.5% (3)	41	0.2%	-2.05%	2.24%	-2.05%	2.24%	0.08%	9.21%	-2.26%	9.33%	-2.26%	9.33%	-2.26%	9.33%
Courtland/Pru RE Global Ptrshp II	Apr-12	NCREIF ODCE Index + 1.5% (3)	40	0.2%	1.26%	2.24%	1.26%	2.24%	6.89%	9.21%	8.04%	9.33%	9.52%	11.58%	9.15%	11.58%
<i>Real Estate Debt Managers</i>																
Basis Real Estate Fund I	Jan-18	NCREIF ODCE Index + 1.5% (3)	11	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
Total Direct Real Estate	Jun-05	NCREIF ODCE Index (3)	1,065	5.6%	1.75%	1.87%	1.75%	1.87%	8.37%	7.71%	8.29%	7.83%	10.10%	9.71%	6.68%	4.64%
Global REITs																
BTC Global REIT Fund	Mar-13	FTSE EPRA/NAREIT Developed Index	597	3.1%	-0.10%	-0.15%	4.88%	4.10%	13.25%	11.98%	8.68%	7.67%	6.52%	5.70%	6.13%	5.35%
Total GLOBAL REITs	Apr-07	Blended / FTSE EPRA/NAREIT Dev Index	597	3.1%	-0.10%	-0.15%	4.88%	4.10%	13.25%	11.98%	8.10%	7.67%	6.44%	5.70%	14.26%	14.03%
TOTAL REAL ESTATE INVESTMENT TRUSTS																
TOTAL REITs	Mar-00	Custom	597	3.1%	-0.10%	-0.15%	4.88%	4.10%	13.25%	11.98%	8.10%	7.67%	7.22%	7.13%	16.72%	16.74%
Hedge Fund																
AQR Capital Management	Jun-18	Blended	95	0.5%	1.34%	1.25%	0.70%	-1.35%	0.70%	-1.35%	0.70%	-1.35%	0.70%	-1.35%	0.70%	-1.35%
Gladus - Options	May-18	Blended	98	0.5%	1.44%	1.30%	-2.70%	-1.85%	-2.58%	-2.38%	-2.58%	-2.38%	-2.58%	-2.38%	-2.58%	-2.38%
Neuberger Berman - Options	Apr-18	CBOE S&P 500 PutWrite Index	346	1.8%	1.62%	1.40%	0.51%	-3.45%	2.72%	-1.38%	2.72%	-1.38%	2.72%	-1.38%	2.72%	-1.38%
<i>Options Strategies</i>	Apr-18	Blended	540	2.8%	1.53%	1.33%	-0.21%	-2.40%	1.71%	-0.49%	1.71%	-0.49%	1.71%	-0.49%	1.71%	-0.49%
KKR Prisma Codlin Fund	Mar-16	LIBOR + 5%	71	0.4%	0.25%	0.65%	-2.28%	4.98%	-2.30%	7.43%	2.03%	6.48%	2.03%	6.48%	2.03%	6.48%
PAAMCO Newport Monarch	Apr-16	LIBOR + 5%	193	1.0%	0.96%	0.65%	-0.91%	4.98%	0.21%	7.43%	3.24%	6.50%	3.24%	6.50%	3.24%	6.50%
<i>Hedge Fund of Funds</i>	Mar-16	LIBOR + 5%	264	1.4%	0.72%	0.65%	-1.44%	4.98%	-1.04%	7.43%	2.42%	6.48%	2.42%	6.48%	2.42%	6.48%
Total Hedge Funds	Mar-16	Custom	804	4.2%	1.22%	1.00%	-0.67%	2.15%	0.01%	4.68%	2.78%	5.56%	2.78%	5.56%	2.78%	5.56%
Commodities																
Invesco Balanced Risk Commodity Trust	Jun-16	Bloomberg Commodity Index	245	1.3%	1.96%	1.01%	-5.76%	-5.46%	-6.22%	-5.67%	-1.56%	-1.95%	-1.56%	-1.95%	-1.56%	-1.95%
PIMCO Commodity Alpha Fund	May-16	Bloomberg Commodity Index	114	0.6%	4.30%	1.01%	6.07%	-5.46%	9.30%	-5.67%	12.47%	-0.44%	12.47%	-0.44%	12.47%	-0.44%
Total Commodities	May-16	Bloomberg Commodity Index	359	1.9%	2.69%	1.01%	-2.30%	-5.46%	-1.80%	-5.67%	2.97%	-0.44%	2.97%	-0.44%	2.97%	-0.44%
Opportunity Fund																
Alinda Capital Partners	Dec-09	CPI + 5% (3)	23	0.1%	-3.87%	1.43%	-3.87%	1.43%	-17.12%	7.28%	-7.64%	6.99%	2.00%	6.52%	1.64%	6.76%
Macquarie Infrastructure Partners II	Apr-10	CPI + 5% (3)	38	0.2%	1.82%	1.43%	1.82%	1.43%	7.29%	7.28%	6.89%	6.99%	3.79%	6.52%	8.06%	6.76%
Macquarie Infrastructure Partners III	Oct-14	CPI + 5% (3)	54	0.3%	1.75%	1.43%	1.75%	1.43%	15.18%	7.28%	13.99%	6.99%	12.02%	6.48%	12.02%	6.48%
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%	0.41%	1.43%	0.41%	1.43%	3.08%	7.28%	3.49%	6.99%	4.80%	6.52%	6.06%	6.76%
TOTAL OPPORTUNITY FUND	Jul-99	Custom	129	0.7%	0.79%	0.08%	3.97%	4.41%	6.02%	7.39%	3.02%	7.23%	5.38%	6.77%	7.80%	6.18%
TOTAL FUND																
TOTAL FUND ex-Overlay	Sep-14	Policy Portfolio	18,992	99.4%	1.62%	1.45%	1.62%	2.49%	2.06%	3.06%	9.49%	9.88%	5.89%	6.17%	10.93%	11.35%
Parametric Clifton Cash Overlay	Sep-14		110	0.6%	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
TOTAL FUND	Oct-81	Policy Portfolio	19,102	100.0%	1.61%	1.45%	1.81%	2.49%	2.27%	3.06%	9.70%	9.88%	5.92%	6.17%	10.95%	11.35%

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%

Note: Assets and liabilities are estimated and unaudited through February 28, 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.