

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

Investment Update



November 2017

Volume 28, Issue 5

	November <u>2017</u>	Quarter <u>Ended</u>	Fiscal <u>Y-T-D</u>	1 Year <u>Ended¹</u>	3 Years <u>Ended¹</u>	5 Years <u>Ended¹</u>	10 Years <u>Ended¹</u>
SURS TOTAL FUND	1.3%	3.8%	6.3%	16.6%	6.7%	9.2%	5.7%
Market Goal / Policy Portfolio	1.1%	3.5%	5.7%	15.8%	6.5%	9.2%	5.8%
Public Funds Index	1.6%	4.5%	6.8%	16.8%	6.9%	9.2%	5.5%

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 (LIBOR + 5%) 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	\$ 4,617	\$ 152	\$ 4,769	13.4%	5.6%	5.9%	24.9%	23.0%	23.0%
Private Equity	976		976	0.0%	0.0%	5.1%	5.1%	6.0%	6.0%
Non-U.S. Equity	3,711	(87)	3,624	6.8%	5.9%	6.2%	18.9%	19.0%	19.0%
Global Equity	1,706	(139)	1,567	-0.7%	0.0%	8.9%	8.2%	8.0%	8.0%
Fixed Income	3,671	55	3,726	3.9%	0.0%	15.5%	19.5%	19.0%	19.0%
TIPS	688		688	3.6%	0.0%	0.0%	3.6%	4.0%	4.0%
Emerging Market Debt	590		590	0.0%	0.0%	3.1%	3.1%	3.0%	3.0%
Real Estate	1,812	(0)	1,812	3.8%	0.0%	5.6%	9.5%	10.0%	10.0%
Hedged Strategies	922		922	0.0%	0.0%	4.8%	4.8%	5.0%	5.0%
Commodities	356	19	376	0.1%	0.0%	1.9%	2.0%	2.0%	2.0%
Opportunity Fund	105		105	0.0%	0.0%	0.5%	0.5%	1.0%	1.0%
Total Fund	\$ 19,154	\$ -	\$ 19,154	30.9%	11.5%	57.6%	100.0%	100.0%	100.0%

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

Total Fund Summary

SURS total fund returned 1.3% for November, exceeding the Market Goal by 0.2% and trailing the estimated Public Funds Index by 0.3%.

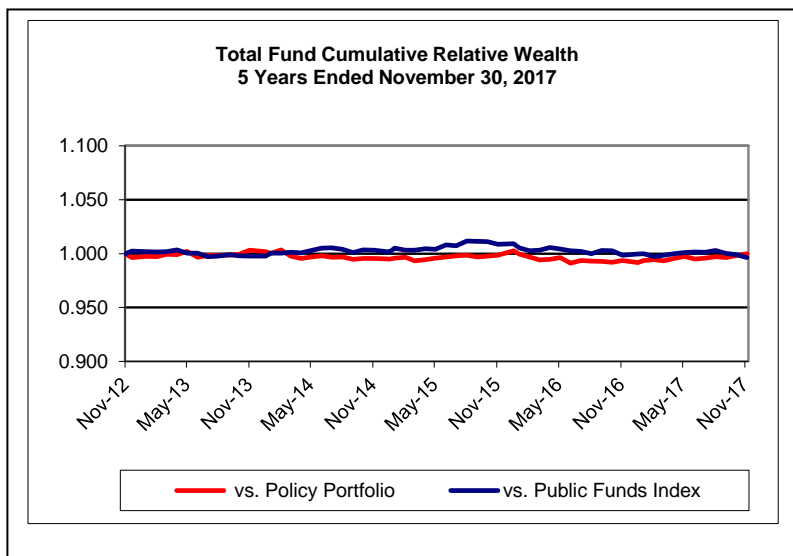
The above benchmark return relative to the Market Goal during November was due primarily to:

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

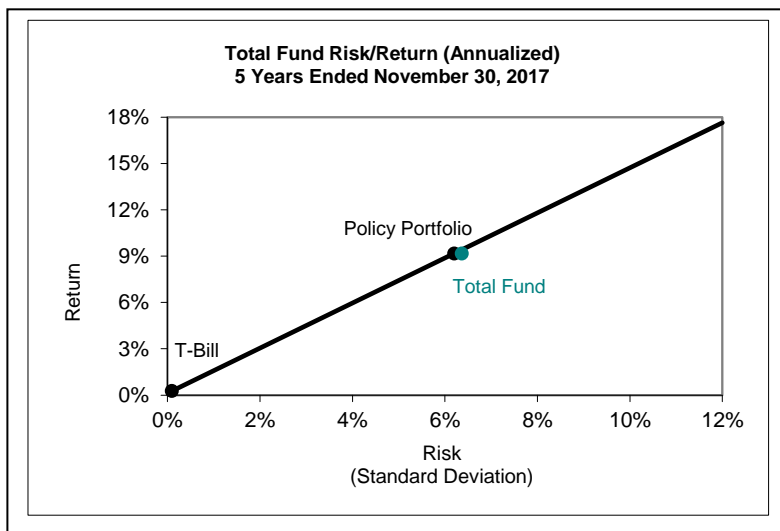
Investment Management Firms Utilized by SURS		
Emerging, Minority, Women and Disabled Ownership as of September 2017		
	Actual	Goal
As a % of Total Assets	28.5%	
As a % of Total Assets, per Public Act 96-0006	19.6%	20.0%
As a % of Total Actively-Managed Assets, per Public Act 96-0006	26.9%	25.0%

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 matched the Policy Portfolio. The chart also indicates that during the same time period, SURS portfolio has lagged the median Public Funds Index return by approximately 0.4%.



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 25 basis points on an annualized basis (9.17% versus required return of 9.42%).

SURS Total Fund Investment Performance			
As of November 2017			
	SURS Fund	CPI-U *	SURS Real Return
1 Year Ended	16.6%	2.2%	14.4%
5 Years Ended	9.2%	1.4%	7.8%
10 Years Ended	5.7%	1.6%	4.1%
20 Years Ended	7.0%	2.1%	4.9%
25 Years Ended	8.2%	2.2%	6.0%
30 Years Ended	8.9%	2.6%	6.3%
Since October 1981	10.0%	2.7%	7.3%

* CPI-U includes food and energy prices.

** SURS inflation assumption is 2.75%.

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

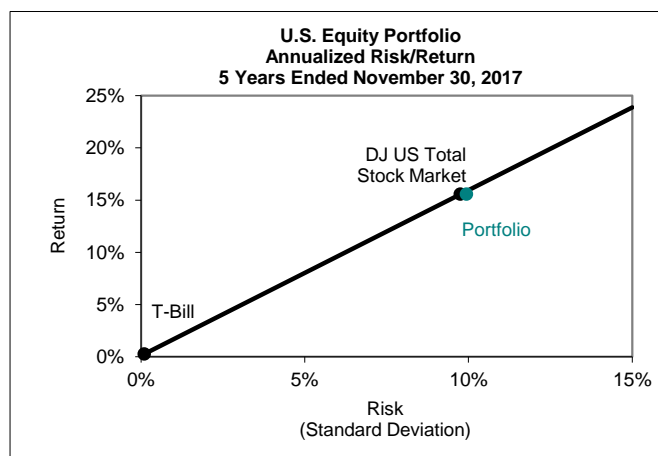
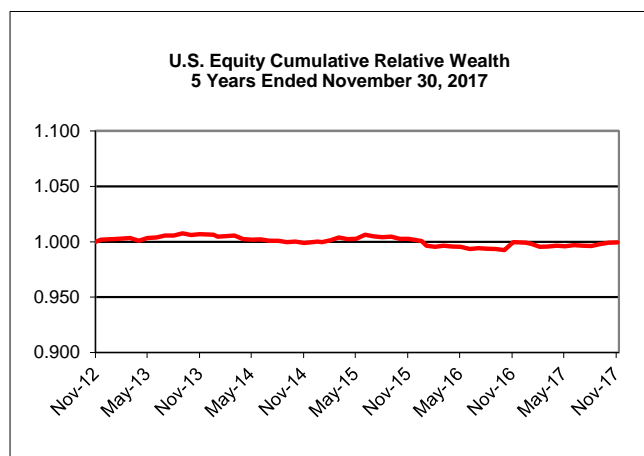
U.S. Equities

U.S. Equities experienced positive returns for the month of November. The broad market, as measured by the Dow Jones U.S. Total Stock Market (TSM) Index, posted a return of 3.0% for the month. During November, large cap outperformed small cap stocks, and results were mixed between growth and value stocks. SURS portfolio exceeded the benchmark for the month by 0.1%, returning 3.1%.

	November 2017	FYTD	1 YR	3 YR	5 YR	10 YR
SURS	3.1%	10.3%	22.3%	10.7%	15.6%	8.4%
Performance Benchmark	3.0%	10.1%	22.3%	10.7%	15.6%	8.5%
DJ U.S. Total Stock Market	3.0%	10.1%	22.3%	10.7%	15.6%	8.5%
DJ U.S. Large Cap TSM	3.0%	10.1%	22.9%	10.8%	15.7%	8.4%
DJ U.S. Lrg Cap Growth TSM	3.3%	11.8%	28.3%	12.4%	17.2%	9.6%
DJ U.S. Lrg Cap Value TSM	3.0%	8.9%	18.4%	9.9%	14.4%	6.9%
DJ U.S. Small Cap TSM	2.9%	9.2%	16.0%	10.4%	15.2%	9.8%
DJ U.S. Sm Cap Growth TSM	2.5%	11.1%	21.4%	10.5%	15.5%	9.9%
DJ U.S. Sm Cap Value TSM	3.2%	7.3%	10.7%	10.1%	14.7%	9.6%
S&P 500	3.1%	10.2%	22.9%	10.9%	15.7%	8.3%
Russell 3000	3.0%	10.1%	22.3%	10.8%	15.6%	8.4%
Russell 2000	2.9%	9.6%	18.3%	11.1%	15.0%	8.7%

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 0.1%. On a risk-adjusted basis, SURS U.S. Equity portfolio return trailed its benchmark by 31 basis points while incurring slightly greater risk than the benchmark. SURS portfolio has returned 15.56%, while the risk-adjusted benchmark return is 15.87%.



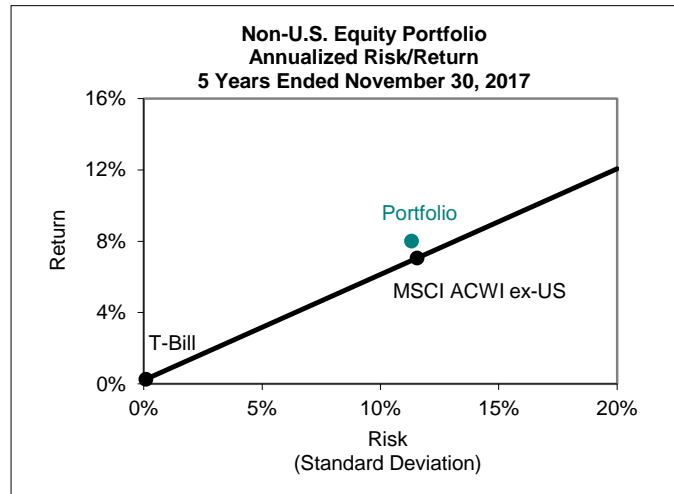
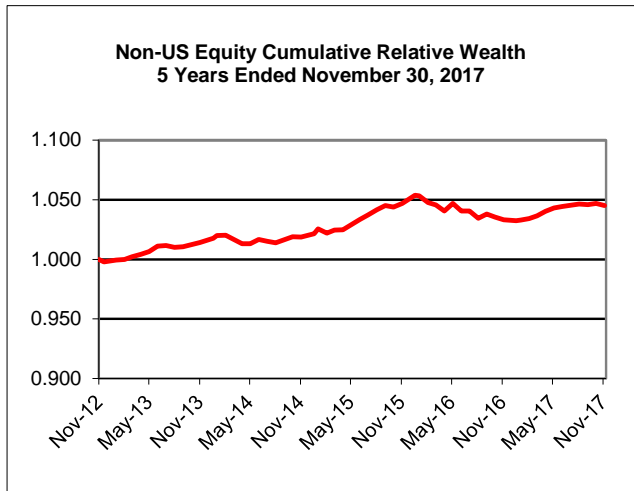
Non-U.S. Equities

Non-U.S. Equities posted positive returns for the month of November. The broad international markets, as represented by the MSCI All Country World Ex-US Index, returned 0.8%. SURS portfolio performance lagged the benchmark for the period by 0.2%, returning 0.6%. Growth stocks outperformed value stocks for the month. Comparative performance of the emerging markets has been a detractor to relative performance for the five-year period.

	November 2017	FYTD	1 YR	3 YR	5 YR	10YR
SURS	0.6%	9.1%	29.1%	6.6%	8.0%	1.7%
Performance Benchmark	0.8%	9.0%	27.6%	5.7%	7.1%	1.5%
MSCI All Country World Ex-US	0.8%	9.0%	27.6%	5.7%	7.1%	1.5%
MSCI All Country World Ex-US Growth	1.1%	10.1%	31.1%	7.3%	8.1%	2.1%
MSCI All Country World Ex-US Value	0.5%	8.0%	24.2%	4.1%	6.0%	0.8%
MSCI EAFE	1.0%	8.1%	27.3%	6.0%	8.2%	1.5%
MSCI EAFE Growth	1.2%	8.6%	29.5%	7.3%	8.9%	2.3%
MSCI EAFE Value	0.9%	7.6%	25.1%	4.6%	7.5%	0.8%
MSCI EAFE Small Cap	1.6%	11.1%	33.8%	13.4%	13.6%	5.5%
MSCI Emerging Markets	0.2%	11.9%	32.8%	6.1%	4.6%	1.4%

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 4.5%. On a risk-adjusted basis, SURS Non-U.S. Equity portfolio has outpaced its benchmark by 109 basis points, generating a slightly higher return although with slightly less volatility than the benchmark. SURS portfolio has returned 8.00%, while the risk-adjusted benchmark return is 6.91%.



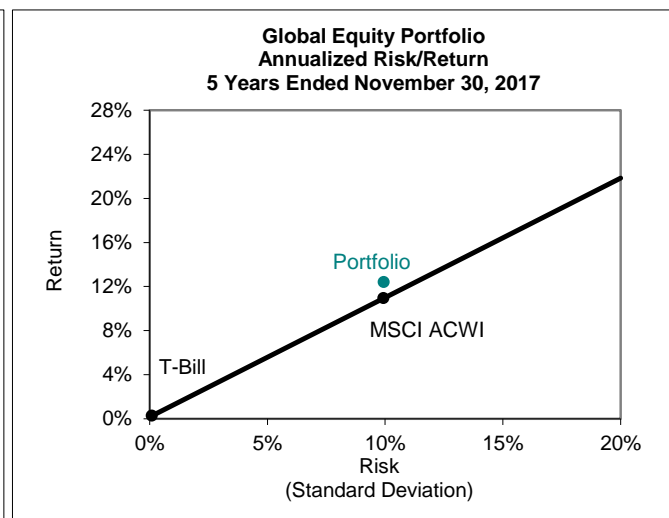
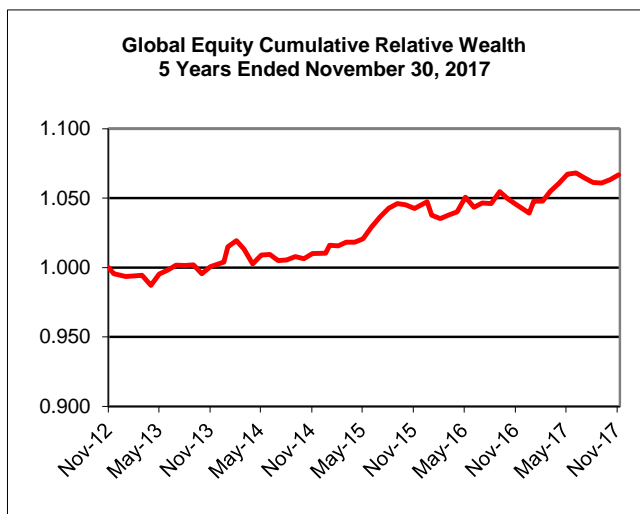
Global Equities

Global Equities posted positive returns for the month of November. The broad market as measured by the MSCI All Country World Index (ACWI) returned 1.9% during the month. SURS portfolio performance surpassed the benchmark return during November by 0.4%, returning 2.3%.

	November 2017	FYTD	1 YR	3 YR	5 YR	10 YR
SURS	2.3%	9.3%	27.2%	10.0%	12.4%	5.1%
Performance Benchmark	1.9%	9.4%	24.6%	8.0%	10.9%	4.6%
MSCI All Country World	1.9%	9.4%	24.6%	8.0%	10.9%	4.4%
MSCI World	2.2%	9.1%	23.7%	8.2%	11.8%	4.8%
Dow Jones U.S. Total Stock Mkt	3.0%	10.1%	22.3%	10.7%	15.6%	8.5%
MSCI All Country World Ex-US	0.8%	9.0%	27.6%	5.7%	7.1%	1.5%

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 6.7%. The portfolio is generating slightly higher returns than, and with slightly more volatility than, the benchmark. On a risk-adjusted basis, the portfolio outpaced its benchmark by 143 basis points on an annualized basis of 12.38% versus a required return of 10.95%.



Private Equities

Private Equities posted positive returns for the quarter ended September. 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 September 30, 2017 was 12.8% as compared to its benchmark return of 21.5%.

	September 2017	FYTD	1 YR	3 YR	5 YR	10 YR
SURS	2.3%	12.8%	12.8%	6.7%	10.7%	7.3%
Performance Benchmark	3.8%	21.5%	21.5%	12.0%	17.5%	10.3%

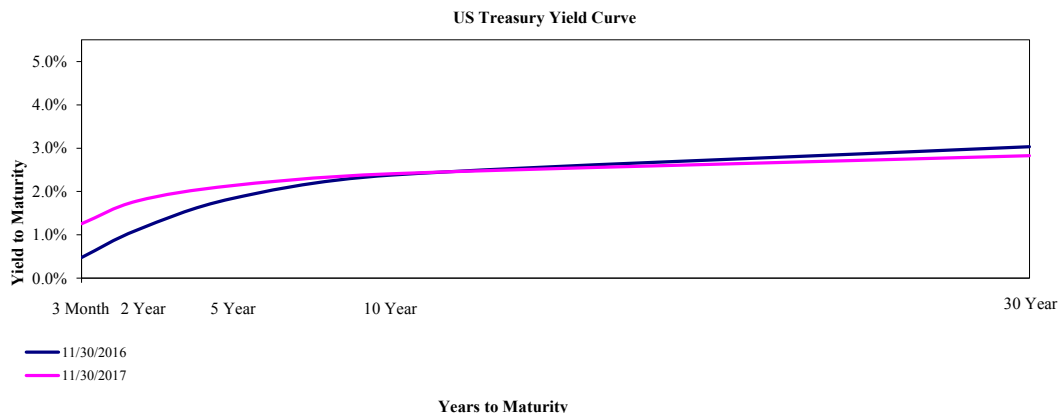
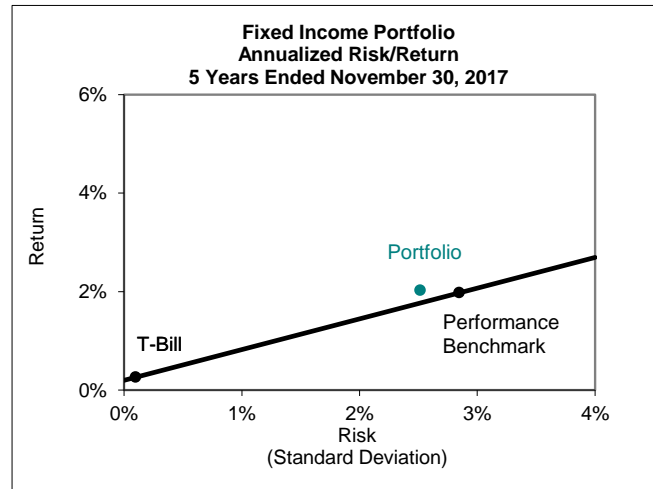
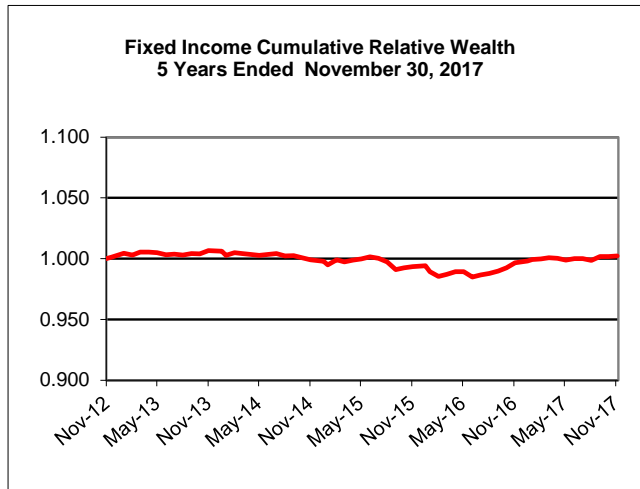
Fixed Income

The U.S. fixed income markets experienced negative returns for the month of November. 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%, matching the benchmark return during November. The Long Term Government and Long Term Corporate sectors experienced the strongest performance for the period.

	November 2017	FYTD	1 YR	3 YR	5 YR	10 YR
SURS	-0.1%	1.0%	3.8%	2.2%	2.0%	4.6%
Performance Benchmark	-0.1%	0.8%	3.2%	2.1%	2.0%	4.0%
Bloomberg Barclays U.S. Aggregate	-0.1%	0.8%	3.2%	2.1%	2.0%	4.0%
Bloomberg Barclays Universal	-0.2%	1.0%	3.9%	2.6%	2.4%	4.3%
Long Term Government	0.7%	1.2%	6.2%	3.2%	2.7%	6.3%
Intermediate Government	-0.3%	-0.1%	1.1%	1.0%	0.9%	2.7%
Long Term Corporate	0.3%	3.1%	11.5%	5.5%	4.8%	7.6%
Intermediate Corporate	-0.3%	0.9%	3.9%	2.8%	2.6%	4.8%
Mortgage Backed	-0.1%	0.8%	2.1%	1.8%	2.0%	3.8%
90-day Treasury Bills	0.1%	0.5%	0.9%	0.4%	0.3%	0.4%
3-month LIBOR	0.1%	0.5%	1.1%	0.6%	0.5%	0.9%

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 0.2%. On a risk-adjusted basis, the portfolio is producing a slightly higher return with slightly less volatility than the benchmark. The portfolio has outpaced its risk-adjusted benchmark by 25 basis points on an annualized basis of 2.02% versus a required return of 1.77%.



11/30/2016	0.48%	1.11%	1.84%	2.38%	3.03%
11/30/2017	1.26%	1.78%	2.14%	2.41%	2.83%

Treasury Inflation-Protected Securities (TIPS)

The TIPS markets experienced positive results during November, returning 0.1% for the month. SURS portfolio performance matched the benchmark for the period, returning 0.1%. SURS implemented a passive TIPS strategy in May 2017 to replace the active TIPS strategy in the investment portfolio.

	November 2017	FYTD	1 YR	3 YR	5 YR	10 YR
SURS	0.1%	1.2%	2.3%	1.2%	-0.2%	3.8%
Custom Benchmark	0.1%	1.2%	2.0%	1.4%	-0.2%	3.4%
Bloomberg Barclays U.S. TIPS Index	0.1%	1.2%	2.0%	1.4%	-0.2%	3.4%
Bloomberg Barclays 1-10 year TIPS Index	-0.1%	0.8%	1.5%	1.1%	-0.1%	2.9%
90-day Treasury Bills	0.1%	0.5%	0.9%	0.4%	0.3%	0.4%

Emerging Market Debt (EMD)

The emerging market debt markets experienced positive results during November, returning 0.9% for the month. SURS portfolio performance matched the benchmark for the period, returning 0.9%. For the month, local-currency outperformed dollar-denominated and corporate securities.

	November 2017	FYTD	1 YR	3 YR	5 YR	10 YR
SURS	0.9%	3.2%	14.6%	4.7%	4.7%	4.7%
Custom Benchmark	0.9%	2.6%	12.4%	5.2%	5.2%	5.2%
JPM CEMBI Broad	0.0%	2.8%	8.6%	6.4%	6.4%	6.4%
JPM EMBI Global Diversf	0.1%	3.1%	10.9%	6.9%	6.9%	6.9%
JPM GBI-EM Global Diversf	1.7%	2.3%	15.0%	3.6%	3.6%	3.6%

Real Estate

Real Estate Investment Trust Securities (REITs)

The global REIT markets experienced positive investment performance for November. SURS total REIT portfolio matched its benchmark, returning 2.8% for the month.

	November 2017	FYTD	1 YR	3 YR	5 YR	10 YR
SURS	2.8%	4.2%	12.5%	5.2%	8.4%	5.2%
Custom Benchmark	2.8%	3.9%	12.1%	5.2%	8.2%	4.7%
FTSE EPRA /NAREIT Developed Index	2.8%	3.9%	12.1%	4.1%	6.8%	2.6%
FTSE EPRA /NAREIT Developed Ex-U.S	2.8%	6.4%	17.9%	4.0%	5.1%	0.8%

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 September 30, 2017 was 7.0% as compared to its benchmark return of 6.9%

	September 2017	FYTD	1 YR	3 YR	5 YR	10 YR
SURS	1.5%	7.0%	7.0%	10.2%	10.9%	5.9%
SURS Core Real Estate	1.1%	5.9%	5.9%	9.5%	9.5%	5.3%
SURS Non-Core Real Estate	2.6%	10.0%	10.0%	12.5%	15.1%	8.5%
NCREIF ODCE Index	1.5%	6.9%	6.9%	10.3%	10.8%	4.3%
Consumer Price Index	0.8%	0.8%	2.2%	1.2%	1.3%	2.0%

Hedged Strategies

Hedged strategies became a component of SURS portfolio in March 2016. The asset class experienced positive results during November, returning 0.5% for the month. SURS portfolio performance lagged the benchmark for the period by 0.9%, returning -0.4%.

	November 2017	FYTD	1 YR	3 YR	5 YR	Since Inception
SURS	-0.4%	2.3%	6.6%	4.2%	4.2%	4.2%
Custom Benchmark	0.5%	2.6%	6.1%	5.9%	5.9%	5.9%
HFRI Fund of Funds Composite	0.1%	3.6%	7.9%	6.5%	6.5%	6.5%
HFRI Fund Weighted Composite	0.5%	3.8%	8.6%	8.2%	8.2%	8.2%

Commodities

SURS began investing in commodities in May 2016. Commodities experienced negative results during November, returning -0.5% for the month. SURS portfolio performance surpassed the benchmark for the period by 1.3%, returning 0.8%.

	November 2017	FYTD	1 YR	3 YR	5 YR	Since Inception
SURS	0.8%	8.0%	4.5%	5.0%	5.0%	5.0%
Custom Benchmark	-0.5%	4.2%	0.5%	1.0%	1.0%	1.0%

Commodities

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



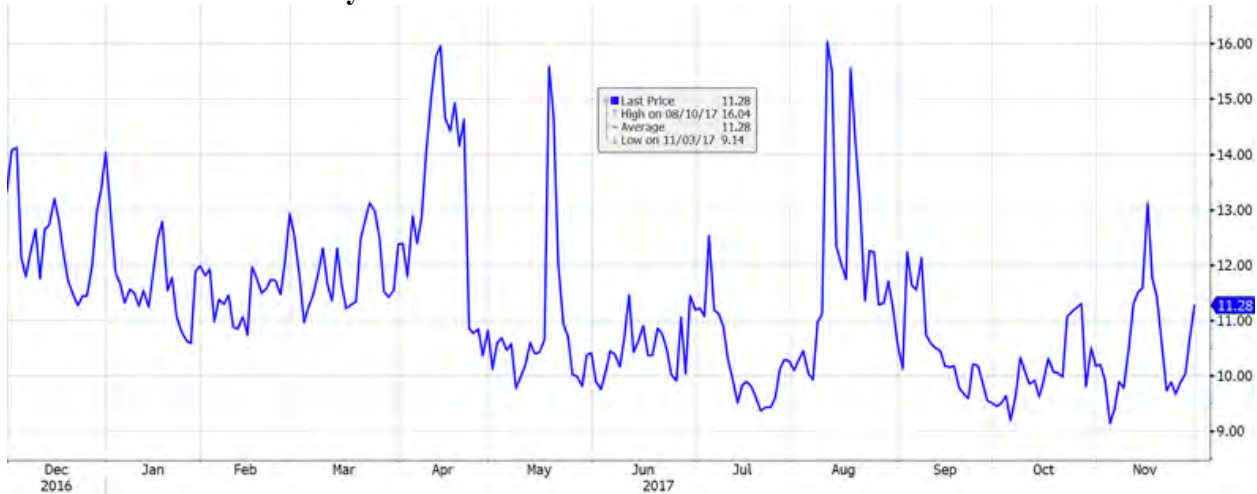
Source: Bloomberg. Calculations are as of the last monthly trading day. All data is as of November 30, 2017.

Opportunity Fund

The Opportunity Fund currently is comprised of an infrastructure portfolio that reports performance one quarter in arrears. The one-year return through September 30, 2017 was 2.5% versus its benchmark return of 6.8%.

	September 2017	FYTD	1 YR	3 YR	5 YR	10 YR
SURS	0.0%	3.7%	2.5%	4.6%	8.4%	9.0%
Custom Benchmark	0.5%	1.7%	6.8%	6.1%	6.8%	3.5%

CBOE S&P 500 Volatility Index

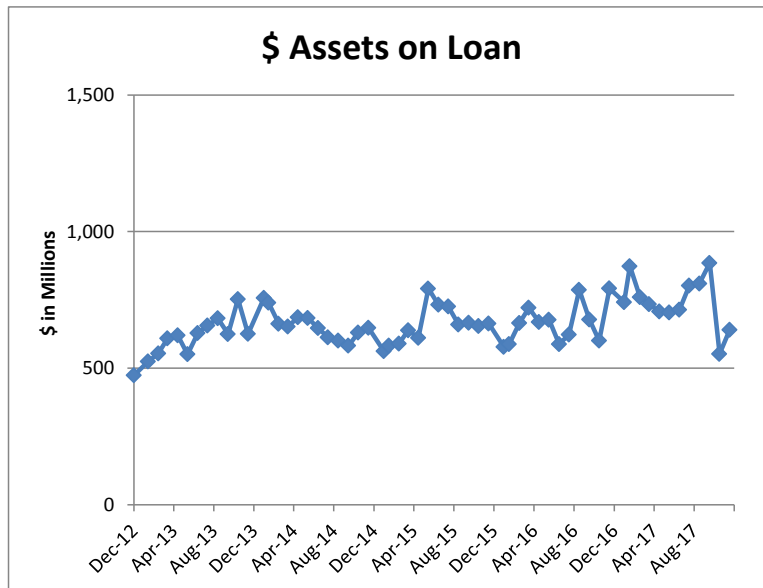


Source: Bloomberg. Calculations are as of the last monthly trading day. All data is as of November 30, 2017.

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 November and the 2018 fiscal year are as listed, below:

Securities Lending Income as of November 30, 2017	
Total for the Month	\$268,299
Fiscal Year to Date	\$1,626,332
Fiscal Year to Date Monthly Average	\$325,266



**Schedule of Self-Managed Plan Investment Allocation
as of November 30, 2017**

	<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			43,914,436			43,914,436
PIMCO Total Return Institutional			42,746,991			42,746,991
Fidelity Puritan Class K				214,506,132		214,506,132
Ariel Fund Institutional	37,565,401					37,565,401
American Beacon Large Cap Value Inst.	13,418,720					13,418,720
Wells Fargo Small Company Growth R6	18,283,439					18,283,439
Fidelity Growth Company Commingled Pool	128,265,671					128,265,671
Fidelity Contrafund Commingled Pool	114,641,595					114,641,595
Fidelity Low-Priced Stock Class K	50,218,051					50,218,051
Fidelity Diversified International Class K		50,462,973				50,462,973
Fidelity Real Estate Investment					19,211,868	19,211,868
Passively Managed						
Fidelity U.S. Bond Index Institutional			38,622,365			38,622,365
Fidelity Freedom Index Funds - Inst Premium ⁽¹⁾				285,086,237		285,086,237
Fidelity Extended Market Index Premium	48,984,536					48,984,536
Fidelity 500 Index Institutional	229,177,595					229,177,595
Fidelity Global ex-U.S. Index Institutional		31,353,877				31,353,877
Fidelity Total	640,555,008	81,816,849	125,283,792	499,592,369	19,211,868	1,366,459,886 60.7%
TIAA-CREF Investment Options						
Actively Managed						
CREF Money Market Account R3			6,770,782			6,770,782
Vanguard Federal Money Market Fund - Investor ⁽⁴⁾			14,062,993			14,062,993
TIAA Traditional Annuity			115,896,925			115,896,925
CREF Bond Market Account R3			51,194,231			51,194,231
CREF Inflation-Linked Bond Account R3			25,271,068			25,271,068
CREF Social Choice Account R3				55,860,882		55,860,882
CREF Growth Account R3 ⁽²⁾	587,699					587,699
CREF Stock Account R3	183,088,048					183,088,048
CREF Global Equities Account R3		64,041,375				64,041,375
Dimensional Target Date Ret Inc Fund - Inst ⁽⁴⁾				1,414,359		1,414,359
TIAA Real Estate Account					18,950,287	18,950,287
Passively Managed						
CREF Equity Index Account R3	93,151,372					93,151,372
TIAA-CREF Large-Cap Growth Index - Institutional	127,744,246					127,744,246
TIAA-CREF Lifecycle Index Funds - Institutional Class				125,427,286		125,427,286
TIAA-CREF Total	404,571,364	64,041,375	213,195,998	182,702,527	18,950,287	883,461,552 39.3%
GRAND TOTALS	<u>\$1,045,126,373</u> 46.5%	<u>\$145,858,225</u> 6.5%	<u>\$338,479,790</u> 15.0%	<u>\$682,294,896</u> 30.3%	<u>\$38,162,156</u> 1.7%	<u>\$2,249,921,439</u> 100.0%
SMP Forfeiture Reserve ⁽³⁾						15,343,839
SMP Disability Reserve ⁽³⁾						98,903,398
Total SMP Investments						<u>2,364,168,676</u>

- As of November 30, 2017, 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 individual mutual/variable annuity funds.
- 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.
- Effective August 31, 2017, the fund became an SMP approved investment option.

SURS Private Equity Program Returns
Investment Values for Month Ended November 30, 2017
Investment Performance for Quarter Ended September 30, 2017 ⁽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%	62	1.77%	3.76%	16.12%	21.52%	16.12%	21.52%	4.33%	12.04%	11.02%	17.51%	5.33%	10.32%	28.17%	13.30%
Adams Street 2017 Global Fund (FOF)	Aug-17	DJ US Ttl Stk Mkt + 3%	2	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%	27	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%	38	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Adams Street 2014 Global Fund (FOF)	May-14	DJ US Ttl Stk Mkt + 3%	61	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Adams Street 2013 Global Fund (FOF)	Mar-13	DJ US Ttl Stk Mkt + 3%	71	-5.48%	3.76%	4.46%	21.52%	4.46%	21.52%	3.90%	12.04%	4.35%	16.51%	4.35%	16.51%	4.35%	16.51%
Adams Street 2012 Global Fund (FOF)	Apr-12	DJ US Ttl Stk Mkt + 3%	61	3.36%	3.76%	12.70%	21.52%	12.70%	21.52%	8.46%	12.04%	8.97%	17.51%	8.65%	16.09%	8.65%	16.09%
Adams Street 2009 Global Offering (FOF)	Jan-09	DJ US Ttl Stk Mkt + 3%	81	3.97%	3.76%	12.28%	21.52%	12.28%	21.52%	11.23%	12.04%	12.85%	17.51%	12.54%	18.03%	12.54%	18.03%
Adams Street 2008 Global Offering (FOF)	Jan-08	DJ US Ttl Stk Mkt + 3%	71	4.22%	3.76%	12.75%	21.52%	12.75%	21.52%	13.24%	12.04%	15.41%	17.51%	13.69%	10.93%	13.69%	10.93%
Adams Street Global Opportunities Secondary Fund - 2004 (FOF)	Mar-04	DJ US Ttl Stk Mkt + 3%	6	8.90%	3.76%	16.93%	21.52%	16.93%	21.52%	17.39%	12.04%	8.49%	17.51%	7.11%	10.32%	11.26%	11.35%
Adams Street 2007 Global Opportunities Portfolio (FOF)	Jun-07	DJ US Ttl Stk Mkt + 3%	41	5.03%	3.76%	11.87%	21.52%	11.87%	21.52%	3.79%	12.04%	10.42%	17.51%	8.23%	10.32%	8.30%	10.08%
Adams Street Global Secondary Fund 5 - 2012 (FOF)	Oct-12	DJ US Ttl Stk Mkt + 3%	12	2.93%	3.76%	16.64%	21.52%	16.64%	21.52%	3.42%	12.04%	5.09%	16.88%	5.09%	16.88%	5.09%	16.88%
Adams Street 2004 Non-U.S. Fund (FOF)	Jul-98	DJ US Ttl Stk Mkt + 3%	9	4.46%	3.76%	7.46%	21.52%	7.46%	21.52%	-0.99%	12.04%	6.02%	17.51%	3.79%	10.32%	11.73%	9.48%
Total Adams Street Partners	Jan-91		541														
Lincoln Fund I (FOF)	Apr-14	DJ US Ttl Stk Mkt + 3%	35	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Total Fairview Capital Partners	Apr-14		35														
Emerging Private Equity Fund of 1	Jan-17	DJ US Ttl Stk Mkt + 3%	12	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%	9	4.70%	3.76%	5.23%	21.52%	5.23%	21.52%	9.90%	12.04%	9.94%	17.51%	9.00%	12.16%	9.00%	12.16%
Total Muller and Monroe	Dec-04		22														
Pantheon Ventures, Inc. (SEP)	Mar-02	DJ US Ttl Stk Mkt + 3%	105	0.23%	3.76%	8.23%	21.52%	8.23%	21.52%	3.40%	12.04%	9.97%	17.51%	8.14%	10.32%	10.53%	11.00%
Pantheon Europe Fund III - 2003 (FOF)	Jan-03	DJ US Ttl Stk Mkt + 3%	10	13.72%	3.76%	22.97%	21.52%	22.97%	21.52%	-1.83%	12.04%	12.39%	17.51%	6.23%	10.32%	14.70%	12.99%
Pantheon Europe Fund VI - 2008 (FOF)	Sep-08	DJ US Ttl Stk Mkt + 3%	23	12.88%	3.76%	29.30%	21.52%	29.30%	21.52%	9.73%	12.04%	13.96%	17.51%	9.59%	12.89%	9.59%	12.89%
Pantheon Europe Fund VII - 2013 (FOF)	Jan-13	DJ US Ttl Stk Mkt + 3%	29	13.31%	3.76%	30.94%	21.52%	30.94%	21.52%	11.69%	12.04%	11.76%	17.65%	11.76%	17.65%	11.76%	17.65%
Pantheon Global Secondary Fund II - 2004 (FOF)	Mar-04	DJ US Ttl Stk Mkt + 3%	3	0.00%	3.76%	-2.95%	21.52%	-2.95%	21.52%	-3.12%	12.04%	-1.00%	17.51%	-2.62%	10.32%	3.96%	11.35%
Pantheon Multi-Strategy Program 2014 (US), L.P.	Feb-15	DJ US Ttl Stk Mkt + 3%	43	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Pantheon Multi-Strategy Program 2017 (US), L.P.	Nov-17	DJ US Ttl Stk Mkt + 3%	2	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%	85	0.06%	3.76%	14.22%	21.52%	14.22%	21.52%	9.96%	12.04%	13.45%	17.51%	11.16%	10.93%	11.16%	10.93%
Pantheon USA Fund IX - 2013 (FOF)	Jan-13	DJ US Ttl Stk Mkt + 3%	78	0.55%	3.76%	11.20%	21.52%	11.20%	21.52%	9.50%	12.04%	10.52%	17.65%	10.52%	17.65%	10.52%	17.65%
Total Pantheon Ventures, Inc.	Mar-02		378														
Total Private Equities	Jan-91	DJ US Ttl Stk Mkt + 3%	976	2.27%	3.76%	12.84%	21.52%	12.84%	21.52%	6.72%	12.04%	10.73%	17.51%	7.32%	10.32%	20.43%	13.30%

(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 November 30, 2017**

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		452	100.0%	0.3%		5.3%		16.6%		4.4%		8.4%		6.1%	
Non-U.S. Equity																
Affinity Investment Advisors	Jun-15	MSCI EAFE	34	7.5%	-0.3%	1.0%	10.8%	8.1%	31.2%	27.3%	7.5%	6.6%	7.5%	6.6%	7.5%	6.6%
Arga Investment Management	Sep-16	MSCI EAFE	45	9.8%	1.6%	1.0%	9.3%	8.1%	28.6%	27.3%	21.4%	18.7%	21.4%	18.7%	21.4%	18.7%
Brown Capital Management	May-08	MSCI EAFE	35	7.8%	1.2%	1.0%	6.3%	8.1%	24.3%	27.3%	7.1%	6.0%	11.0%	8.2%	5.4%	2.3%
Denali	Apr-17	MSCI EAFE	26	5.8%	0.6%	1.0%	9.0%	8.1%	14.3%	11.9%	14.3%	11.9%	14.3%	11.9%	14.3%	11.9%
Solstein Capital	Oct-17	MSCI EAFE	22	4.8%	2.3%	1.0%	2.3%	1.0%	2.3%	1.0%	2.3%	1.0%	2.3%	1.0%	2.3%	1.0%
Strategic Global Advisors	May-08	MSCI EAFE	63	14.0%	0.1%	1.0%	8.7%	8.1%	30.5%	27.3%	8.9%	6.0%	12.0%	8.2%	5.8%	2.3%
TOTAL NON-U.S. EQUITY	May-08	MSCI EAFE	225	49.7%	0.7%	1.0%	9.1%	8.1%	29.2%	27.3%	6.8%	6.0%	8.5%	8.2%	3.7%	2.3%
Core Fixed Income																
GIA Partners	Jul-14	Bloomberg Barclays U.S. Aggr	38	8.4%	-0.2%	-0.1%	0.9%	0.8%	4.5%	3.2%	2.9%	2.1%	3.1%	2.5%	3.1%	2.5%
Integrity Fixed Income	Oct-17	Bloomberg Barclays U.S. Aggr	20	4.4%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%
New Century Advisors	May-08	Bloomberg Barclays U.S. Aggr	44	9.7%	-0.2%	-0.1%	1.0%	0.8%	3.8%	3.2%	1.7%	2.1%	2.0%	2.0%	4.3%	3.9%
Piedmont Investment Advisors	May-08	Bloomberg Barclays U.S. Aggr	20	4.5%	-0.2%	-0.1%	0.9%	0.8%	3.6%	3.2%	2.3%	2.1%	2.0%	2.0%	4.1%	3.9%
Ramirez Asset Management	May-13	Bloomberg Barclays U.S. Aggr	25	5.6%	0.0%	-0.1%	1.5%	0.8%	4.3%	3.2%	2.7%	2.1%	2.8%	2.4%	2.8%	2.4%
TOTAL Core Fixed Income	May-08	Bloomberg Barclays U.S. Aggr	147	32.6%	-0.2%	-0.1%	0.8%	0.8%	3.8%	3.2%	2.3%	2.1%	2.2%	2.0%	4.4%	3.9%
Emerging Market Debt																
GIA Partners	Apr-15	JPM CEMBI Broad	37	8.2%	0.2%	0.0%	4.3%	2.8%	12.2%	8.6%	6.6%	5.8%	6.6%	5.8%	6.6%	5.8%
LM Capital Group	Apr-15	JPM CEMBI Broad	43	9.5%	0.2%	0.0%	3.2%	2.8%	10.5%	8.6%	5.5%	5.8%	5.5%	5.8%	5.5%	5.8%
TOTAL Emerging Market Debt	Apr-15	JPM CEMBI Broad	80	17.7%	0.2%	0.0%	3.7%	2.8%	11.3%	8.6%	6.0%	5.8%	6.0%	5.8%	6.0%	5.8%

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

SURS Manager Diversity Program Returns
Investment Performance for Month Ended November 30, 2017

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	3,195	1.6%	1.6%	4.9%	4.8%	7.4%	6.8%	17.4%	16.8%	7.1%	6.6%	8.5%	8.3%	6.5%	6.3%
U.S. Equity: Active																	
Channing Capital Management	Apr-05	Russell Midcap Value	195	3.0%	3.4%	8.0%	7.1%	6.8%	6.4%	13.0%	13.9%	7.8%	8.8%	14.6%	15.0%	8.7%	9.4%
EARNEST Partners	Jun-11	Russell Midcap	153	3.4%	3.4%	8.8%	8.0%	10.8%	8.7%	24.9%	18.8%	12.9%	9.3%	16.5%	15.3%	13.5%	12.5%
Gladius	Jun-17	Russell 3000	415	3.0%	3.0%	7.7%	7.9%	9.8%	10.1%	10.8%	11.1%	10.8%	11.1%	10.8%	11.1%	10.8%	11.1%
Piedmont Investment Advisors	Jul-14	S&P 500	623	3.9%	3.1%	10.1%	7.6%	13.2%	10.2%	25.8%	22.9%	12.4%	10.9%	13.1%	11.5%	13.1%	11.5%
Composite, Active U.S. Equity		Blended	1,386	3.5%	3.1%	9.0%	7.9%	11.0%	9.6%	21.9%	20.5%	10.6%	10.5%	15.5%	15.2%	9.7%	9.3%
TOTAL U.S. Equity	Jan-05	Blended	1,386	3.5%	3.1%	9.0%	7.9%	11.0%	9.6%	21.9%	20.5%	10.6%	10.5%	15.5%	15.2%	9.1%	9.0%
Non-U.S. Equity																	
Ativo Capital Management	Jul-08	MSCI ACWI Ex-U.S.	286	0.3%	0.8%	3.8%	4.6%	7.4%	9.0%	24.0%	27.6%	5.4%	5.7%	7.7%	7.1%	4.5%	3.3%
GlobeFlex Capital	Jul-14	MSCI ACWI Ex-U.S.	330	0.6%	0.8%	4.2%	4.6%	11.4%	9.0%	34.4%	27.6%	9.1%	5.7%	5.9%	3.3%	5.9%	3.3%
Strategic Global Advisors	Aug-08	MSCI EAFE	339	0.4%	1.0%	3.6%	5.1%	7.5%	8.1%	27.7%	27.3%	7.6%	6.0%	11.2%	8.2%	7.3%	4.0%
TOTAL Non-U.S. Equity	Aug-06	Blended	956	0.4%	0.9%	3.9%	4.8%	8.8%	8.7%	28.8%	27.5%	7.0%	6.0%	8.6%	7.9%	4.7%	3.3%
Private Equity																	
Fairview Lincoln Fund I	Apr-14	DJ U.S. Total Stk Mkt + 3% (1)	35	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Muller and Monroe Emerg PEF	Jan-17	DJ U.S. Total Stk Mkt + 3% (1)	12	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)	9	4.7%	3.8%	4.7%	3.8%	5.2%	21.5%	5.2%	21.5%	9.9%	12.0%	9.9%	17.5%	9.0%	12.2%
TOTAL Private Equity	Dec-04	DJ U.S. Total Stk Mkt + 3% (1)	57	4.4%	3.8%	4.4%	3.8%	-10.9%	21.5%	-10.9%	21.5%	1.8%	12.0%	5.1%	17.5%	3.7%	11.5%
Fixed Income: Core																	
Garcia Hamilton	Feb-09	Bloomberg Barclays U.S. Aggregate	314	0.2%	-0.1%	0.0%	-0.5%	0.8%	0.8%	3.1%	3.2%	2.5%	2.1%	2.9%	2.0%	5.7%	4.1%
LM Capital Group	Dec-10	Bloomberg Barclays U.S. Aggregate	165	-0.3%	-0.1%	-0.4%	-0.5%	0.8%	0.8%	3.8%	3.2%	2.6%	2.1%	2.2%	2.0%	3.6%	3.2%
Pugh Capital Management	Apr-06	Bloomberg Barclays U.S. Aggregate	164	-0.2%	-0.1%	-0.4%	-0.5%	0.9%	0.8%	3.5%	3.2%	2.2%	2.1%	2.1%	2.0%	4.9%	4.4%
Smith Graham & Company	Apr-06	Bloomberg Barclays U.S. Aggregate	106	-0.1%	-0.1%	-0.2%	-0.5%	1.0%	0.8%	3.4%	3.2%	2.4%	2.1%	2.2%	2.0%	4.5%	4.4%
Composite, Core Fixed Inc		Bloomberg Barclays U.S. Aggregate	748	0.0%	-0.1%	-0.2%	-0.5%	0.9%	0.8%	3.4%	3.2%	2.4%	2.1%	2.3%	2.0%	4.7%	4.4%
TOTAL Fixed Income	Apr-06	Blended	748	0.0%	-0.1%	-0.2%	-0.5%	0.9%	0.8%	2.8%	3.0%	1.9%	1.9%	1.2%	1.1%	4.5%	4.4%
Real Estate																	
Franklin Templeton EMREFF	Aug-11	NCREIF ODCE Index + 1.5% (1)	31	-9.0%	1.9%	-9.0%	1.9%	5.4%	8.4%	5.4%	8.4%	12.7%	11.8%	15.1%	12.3%	13.0%	12.5%
Franklin Templeton MDP RE 2015	Sep-15	NCREIF ODCE Index + 1.5% (1)	16	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)	47	-9.0%	1.9%	-9.0%	1.9%	5.4%	8.4%	5.4%	8.4%	12.7%	11.8%	15.1%	12.3%	13.0%	12.5%

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	\$ 1,386	43.4%
Private Equity	57	1.8%
Non-U.S. Equity	956	29.9%
Global Equity	-	0.0%
Fixed Income	748	23.4%
TIPS	-	0.0%
Real Estate	47	1.5%
Total Fund	\$ 3,195	100.0%

November-17	Incep (1)	Benchmark	\$ millions	% Fund	11/2017 Mgr	11/2017 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	191	1.0%	1.42%	2.87%	10.76%	10.96%	22.35%	23.69%	8.19%	11.32%	15.22%	15.84%	14.94%	15.15%
Mesirow Financial Investment Mgmt	May-11	Russell 2000	183	1.0%	2.51%	2.88%	7.50%	9.64%	15.45%	18.34%	9.54%	11.14%	13.79%	15.02%	10.08%	11.20%
EARNEST Partners	Jun-11	Russell Midcap	153	0.8%	3.42%	3.36%	10.81%	8.74%	24.94%	18.76%	12.85%	9.32%	16.52%	15.26%	13.49%	12.46%
Channing Capital Management	Apr-05	Russell Midcap Value	195	1.0%	2.95%	3.38%	6.83%	6.45%	13.03%	13.95%	7.84%	8.83%	14.60%	14.99%	8.49%	8.84%
Gladius	Dec-16	Russell 3000	415	2.2%	3.04%	3.04%	9.75%	10.10%	18.61%	19.93%	18.61%	19.93%	18.61%	19.93%	18.61%	19.93%
<i>Active U.S. Equities</i>	Oct-81	Blended	1,137	5.9%	2.71%	1.98%	9.17%	5.62%	19.24%	12.58%	8.95%	8.29%	14.04%	14.09%	7.01%	7.89%
Piedmont Investment Advisors	Jan-08	S&P 500	623	3.3%	3.92%	3.07%	13.22%	10.20%	25.79%	22.87%	12.42%	10.91%	17.14%	15.74%	8.69%	8.45%
T. Rowe Price	Mar-08	S&P 500	447	2.3%	2.92%	3.07%	10.70%	10.20%	25.29%	22.87%	12.02%	10.91%	16.28%	15.74%	10.33%	9.80%
<i>Structured Active U.S. *</i>	Oct-87	Blended	1,070	5.6%	3.50%	3.07%	12.15%	10.20%	25.58%	22.87%	12.06%	10.77%	16.68%	15.65%	9.21%	8.45%
Northern Trust Asset Management	Feb-99	Dow Jones U.S. Total Stock Market	1,550	8.1%	3.04%	3.03%	10.08%	10.07%	22.32%	22.29%	10.76%	10.70%	15.59%	15.57%	8.55%	8.49%
RhumbLine Advisers	Feb-05	Custom / Wilshire 5000	860	4.5%	3.03%	3.04%	10.16%	10.08%	22.01%	22.16%	10.97%	10.95%	15.72%	15.72%	8.54%	8.46%
<i>Passive U.S. Equities</i>	Jul-86	Blended	2,410	12.6%	3.04%	3.03%	10.11%	10.08%	22.21%	22.24%	10.85%	10.80%	15.64%	15.62%	8.53%	8.48%
Total U.S. Equities	Oct-81	Dow Jones U.S. Total Stock Market	4,617	24.1%	3.06%	3.03%	10.34%	10.07%	22.25%	22.29%	10.72%	10.70%	15.56%	15.57%	8.42%	8.49%
Non-U.S. Equities																
Ativo Capital Management	Jul-08	MSCI ACWI Ex-US	286	1.5%	0.29%	0.81%	7.36%	9.04%	24.00%	27.59%	5.39%	5.74%	7.69%	7.06%	4.48%	3.31%
GlobeFlex Capital	Dec-11	MSCI ACWI Ex-US	330	1.7%	0.55%	0.81%	11.40%	9.04%	34.40%	27.59%	9.12%	5.74%	10.57%	7.06%	11.18%	7.81%
Progress Investment	May-08	MSCI EAFE	225	1.2%	0.75%	1.05%	9.09%	8.13%	29.20%	27.27%	6.79%	5.97%	8.53%	8.24%	3.72%	2.29%
Strategic Global Advisors	Aug-08	MSCI EAFE	339	1.8%	0.42%	1.05%	7.52%	8.13%	27.73%	27.27%	7.62%	5.97%	11.18%	8.24%	7.29%	4.04%
<i>Active Non U.S. Equities</i>	Jul-92	Blended	1,180	6.2%	0.49%	0.93%	8.84%	8.60%	28.85%	27.43%	6.91%	5.62%	8.32%	7.43%	1.65%	1.66%
BTC International Alpha Tilts	Nov-03	MSCI EAFE	541	2.8%	0.97%	1.05%	8.99%	8.13%	31.60%	27.27%	7.96%	5.97%	10.89%	8.24%	2.91%	1.55%
Fidelity Institutional Asset Mgmt	Dec-11	MSCI ACWI Ex-US	595	3.1%	0.49%	0.81%	8.94%	9.04%	28.48%	27.59%	5.98%	5.74%	7.50%	7.06%	8.47%	7.81%
<i>Structured Active Non U.S. *</i>	Nov-03	Blended	1,136	5.9%	0.72%	0.92%	8.96%	8.61%	29.94%	27.43%	6.92%	5.85%	9.07%	7.60%	2.02%	1.20%
BTC Emerging Markets	Oct-09	MSCI Emerging Markets	246	1.3%	0.16%	0.20%	11.76%	11.90%	32.56%	32.82%	5.94%	6.15%	4.42%	4.61%	4.79%	5.01%
BTC International	Jul-86	MSCI ACWI Ex-US	1,149	6.0%	0.82%	0.81%	9.00%	9.04%	27.98%	27.59%	6.31%	5.74%	7.55%	7.06%	1.94%	1.47%
<i>Passive Non U.S. Equities</i>	Jul-86	Blended / MSCI ACWI Ex-US	1,395	7.3%	0.70%	0.71%	9.41%	9.46%	28.64%	28.34%	6.22%	5.83%	7.19%	6.84%	1.78%	1.43%
Total Non U.S. Equities	Jul-86	MSCI ACWI Ex-US	3,711	19.4%	0.64%	0.81%	9.11%	9.04%	29.07%	27.59%	6.64%	5.74%	8.00%	7.06%	1.67%	1.47%
Global Equities																
Mondrian Investment Partners	Dec-11	MSCI ACWI	545	2.8%	1.86%	1.94%	7.77%	9.44%	23.18%	24.64%	7.77%	8.01%	10.01%	10.94%	9.99%	11.34%
T. Rowe Price Global Focused Growth	Oct-08	MSCI ACWI	600	3.1%	2.87%	1.94%	10.80%	9.44%	32.86%	24.64%	13.99%	8.01%	17.45%	10.94%	14.27%	11.08%
Wellington Management	Jun-02	Custom / MSCI ACWI	561	2.9%	2.02%	1.94%	9.25%	9.44%	25.78%	24.64%	9.28%	8.01%	13.22%	10.94%	5.34%	4.64%
Total Global Equities	Jan-04	Blended / MSCI ACWI	1,706	8.9%	2.27%	1.94%	9.31%	9.44%	27.20%	24.64%	10.00%	8.01%	12.38%	10.94%	5.09%	4.57%
* Structured Active strategies, also known as Enhanced Index strategies, attempt to add modest amounts of excess return over time within a risk controlled framework.																

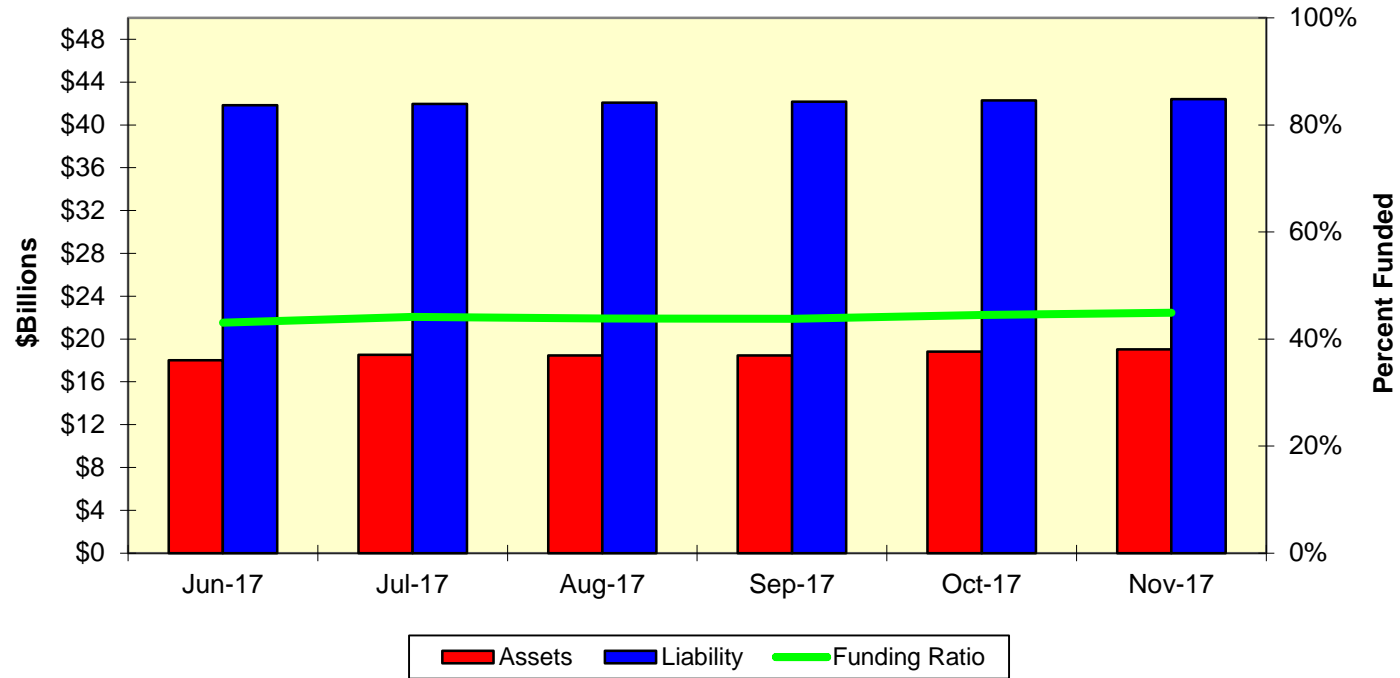
November-17	Incep (1)	Benchmark	\$ millions	% Fund	11/2017 Mgr	11/2017 Bmark	FYTD Mgr	FYTD Bmark	1 YR (2) Mgr	1 YR (2) Bmark	3 YR (2) Mgr	3 YR (2) Bmark	5 YR (2) Mgr	5 YR (2) Bmark	10 YR (2) Mgr	10 YR (2) Bmark
Private Equities																
Adams Street Partners	Jan-91	DJ U.S. Total Stock Market + 3% (3)	541	2.8%	2.16%	3.76%	13.54%	21.52%	13.54%	21.52%	7.66%	12.04%	11.16%	17.51%	6.84%	10.32%
Fairview Capital Partners	Apr-14	DJ U.S. Total Stock Market + 3% (3)	35	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)	22	0.1%	4.40%	3.76%	-10.92%	21.52%	-10.92%	21.52%	1.82%	12.04%	5.10%	17.51%	4.58%	10.32%
	Mar-02	DJ U.S. Total Stock Market + 3% (3)	378	2.0%	2.39%	3.76%	13.11%	21.52%	13.11%	21.52%	5.91%	12.04%	10.71%	17.51%	7.97%	10.32%
Total Private Equities	Jan-91	DJ U.S. Total Stock Market + 3% (3)	976	5.1%	2.27%	3.76%	12.84%	21.52%	12.84%	21.52%	6.72%	12.04%	10.73%	17.51%	7.32%	10.32%
TOTAL EQUITIES																
TOTAL EQUITIES	Oct-81	Blended	11,009	57.5%	1.94%	1.83%	9.29%	8.91%	24.63%	24.20%	9.07%	9.06%	12.29%	12.72%	5.97%	6.41%
Fixed Income																
Cash Flow	Oct-81	90-day T-bills	308	1.6%	0.11%	0.10%	0.53%	0.45%	1.08%	0.87%	0.58%	0.40%	0.39%	0.26%	0.58%	0.36%
<i>Core Fixed Income Managers</i>																
Garcia Hamilton & Associates	Feb-09	Bloomberg Barclays U.S. Aggregate	314	1.6%	0.22%	-0.13%	0.82%	0.78%	3.11%	3.21%	2.50%	2.11%	2.92%	1.98%	5.66%	4.08%
Progress Investment	May-08	Bloomberg Barclays U.S. Aggregate	147	0.8%	-0.19%	-0.13%	0.84%	0.78%	3.77%	3.21%	2.30%	2.11%	2.18%	1.98%	4.39%	3.92%
Pugh Capital Management	Apr-06	Bloomberg Barclays U.S. Aggregate	164	0.9%	-0.18%	-0.13%	0.92%	0.78%	3.51%	3.21%	2.23%	2.11%	2.10%	1.98%	4.56%	3.99%
Smith Graham & Company	Apr-06	Bloomberg Barclays U.S. Aggregate	106	0.6%	-0.09%	-0.13%	1.01%	0.78%	3.41%	3.21%	2.44%	2.11%	2.19%	1.98%	4.19%	3.99%
<i>Core Plus Fixed Income Managers</i>																
LM Capital Group	Dec-10	Bloomberg Barclays U.S. Aggregate	165	0.9%	-0.27%	-0.13%	0.85%	0.78%	3.81%	3.21%	2.57%	2.11%	2.21%	1.98%	3.60%	3.17%
Neuberger Berman	Dec-10	Bloomberg Barclays U.S. Aggregate	349	1.8%	-0.22%	-0.13%	0.92%	0.78%	4.17%	3.21%	2.85%	2.11%	2.66%	1.98%	3.97%	3.17%
PIMCO Total Return	Oct-81	Bloomberg Barclays U.S. Aggregate	397	2.1%	-0.10%	-0.13%	1.24%	0.78%	4.27%	3.21%	2.31%	2.11%	2.12%	1.98%	5.14%	3.99%
TCW MetWest	Nov-01	Bloomberg Barclays U.S. Aggregate	548	2.9%	-0.02%	-0.13%	0.86%	0.78%	3.37%	3.21%	2.25%	2.11%	2.46%	1.98%	5.70%	3.99%
<i>Active Fixed Income</i>	Oct-81	Bloomberg Barclays U.S. Aggregate	2,497	13.0%	-0.07%	-0.13%	0.87%	0.78%	3.45%	3.21%	2.11%	2.11%	2.07%	1.98%	4.73%	3.99%
State Street Global Advisors	Sep-10	Bloomberg Barclays U.S. Aggregate	614	3.2%	-0.13%	-0.13%	0.78%	0.78%	3.22%	3.21%	2.13%	2.11%	1.99%	1.98%	2.89%	2.87%
<i>Passive Fixed Income</i>	Oct-86	Blended / Bloomberg Barclays U.S. Agg	614	3.2%	-0.13%	-0.13%	0.78%	0.78%	3.22%	3.21%	2.13%	2.11%	1.99%	1.98%	3.14%	3.17%
PIMCO Unconstrained	May-13	LIBOR + 3%	481	2.5%	-0.09%	0.35%	1.97%	1.77%	6.36%	4.09%	2.97%	3.65%	2.18%	3.51%	2.18%	3.51%
<i>Absolute Return Fixed Income</i>	May-13	LIBOR + 3%	481	2.5%	-0.09%	0.35%	1.97%	1.77%	6.36%	4.09%	2.97%	3.65%	2.18%	3.51%	2.18%	3.51%
Total Core Fixed Income	Oct-81	Bloomberg Barclays U.S. Aggregate	3,592	18.8%	-0.08%	-0.13%	1.00%	0.78%	3.80%	3.21%	2.23%	2.11%	2.02%	1.98%	4.58%	3.99%
TIPS																
RhumbLine TIPS	May-17	Bloomberg Barclays U.S. TIPS	688	3.6%	0.12%	0.13%	1.22%	1.21%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
Total TIPS	Jul-04	Bloomberg Barclays U.S. TIPS (4)	688	3.6%	0.12%	0.13%	1.19%	1.21%	2.28%	1.97%	1.22%	1.36%	-0.24%	-0.18%	3.81%	3.42%
Emerging Market Debt																
BlueBay Emerging Mkts Select Debt	Mar-15	Custom	192	1.0%	0.84%	0.87%	4.10%	2.72%	14.00%	12.99%	3.50%	5.35%	3.50%	5.35%	3.50%	5.35%
Colchester Local Markets Debt Fund	Apr-15	JPM GBI-EM Global Diversif unhedged	112	0.6%	1.85%	1.68%	1.26%	2.33%	16.01%	15.04%	2.57%	2.61%	2.57%	2.61%	2.57%	2.61%
Progress Investment	Apr-15	JPM Corp Em Mkts Bond Index-Broad	80	0.4%	0.17%	0.02%	3.71%	2.76%	11.28%	8.60%	6.02%	5.76%	6.02%	5.76%	6.02%	5.76%
Prudential Emerging Mkts Debt Blend	Jun-15	Custom	206	1.1%	0.84%	0.87%	3.27%	2.72%	15.80%	12.99%	7.72%	6.20%	7.72%	6.20%	7.72%	6.20%
Total Emerging Market Debt	Mar-15	Custom	590	3.1%	0.94%	0.86%	3.21%	2.64%	14.62%	12.40%	4.72%	5.21%	4.72%	5.21%	4.72%	5.21%
TOTAL FIXED INCOME																
TOTAL FIXED INCOME	Oct-81	Custom	4,871	25.4%	0.07%	0.08%	1.30%	1.17%	4.82%	4.19%	2.35%	2.50%	1.82%	1.94%	4.56%	3.98%

November-17	Incep (1)	Benchmark	\$ millions	% Fund	11/2017 Mgr	11/2017 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)	202	1.1%	1.21%	1.49%	7.03%	6.92%	7.03%	6.92%	10.69%	10.34%	10.69%	10.34%	10.69%	10.34%
JPMCB Strategic Property Fund	Jun-14	NCREIF ODCE Index (3)	206	1.1%	1.35%	1.49%	7.00%	6.92%	7.00%	6.92%	9.95%	10.34%	10.11%	11.00%	10.11%	11.00%
UBS Trumbull Property Fund	Jun-06	NCREIF ODCE Index (3)	380	2.0%	0.99%	1.49%	4.69%	6.92%	4.69%	6.92%	8.62%	10.34%	8.79%	10.77%	6.05%	4.31%
<i>Non-Core Direct Real Estate Managers</i>																
Blue Vista Real Estate Partners IV	Apr-16	NCREIF ODCE Index + 1.5% (3)	21	0.1%	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)	22	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)	33	0.2%	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%	4.56%	1.86%	6.31%	8.42%	6.31%	8.42%	14.23%	11.84%	19.20%	12.27%	17.09%	9.41%
Dune Real Estate Fund III	Jul-13	NCREIF ODCE Index + 1.5% (3)	95	0.5%	4.28%	1.86%	13.49%	8.42%	13.49%	8.42%	11.83%	11.84%	12.84%	12.19%	12.84%	12.19%
Franklin Templeton EMREFF	Aug-11	NCREIF ODCE Index + 1.5% (3)	31	0.2%	-8.99%	1.86%	5.38%	8.42%	5.38%	8.42%	12.73%	11.84%	15.10%	12.27%	12.95%	12.52%
Franklin Templeton FTPREF	Jun-12	NCREIF ODCE Index + 1.5% (3)	12	0.1%	6.25%	1.86%	16.32%	8.42%	16.32%	8.42%	23.51%	11.84%	24.40%	12.58%	22.14%	12.58%
Franklin Templeton MDP RE 2015	Sep-15	NCREIF ODCE Index + 1.5% (3)	16	0.1%	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
Courtland/Pru RE Global Ptnrshp II	Apr-12	NCREIF ODCE Index + 1.5% (3)	37	0.2%	2.07%	1.86%	7.53%	8.42%	7.53%	8.42%	9.15%	11.84%	10.53%	12.21%	9.66%	12.21%
Total Direct Real Estate	Jun-05	NCREIF ODCE Index (3)	1,080	5.6%	1.51%	1.49%	6.95%	6.92%	6.95%	6.92%	10.21%	10.34%	10.86%	10.77%	5.92%	4.31%
Global REITs																
BTC Global REIT Fund	Mar-13	FTSE EPRA/NAREIT Developed Index	732	3.8%	2.80%	2.78%	4.25%	3.93%	13.06%	12.13%	4.87%	4.13%	6.23%	5.54%	6.23%	5.54%
Total GLOBAL REITs	Apr-07	Blended / FTSE EPRA/NAREIT Dev In	732	3.8%	2.80%	2.78%	4.25%	3.93%	12.45%	12.13%	4.80%	4.13%	7.25%	6.72%	2.92%	2.26%
TOTAL REAL ESTATE INVESTMENT TRUSTS																
TOTAL REITs	Mar-00	Custom	732	3.8%	2.80%	2.78%	4.25%	3.93%	12.45%	12.13%	5.18%	5.16%	8.38%	8.25%	5.17%	4.74%
Hedge Fund																
KKR Prisma Codlin Fund	Mar-16	LIBOR + 5%	464	2.4%	-0.44%	0.50%	3.10%	2.58%	6.93%	6.14%	3.79%	5.95%	3.79%	5.95%	3.79%	5.95%
PAAMCO Newport Monarch	Apr-16	LIBOR + 5%	459	2.4%	-0.41%	0.50%	1.59%	2.58%	6.30%	6.14%	5.53%	5.96%	5.53%	5.96%	5.53%	5.96%
Total Hedge Funds	Mar-16	LIBOR + 5%	922	4.8%	-0.42%	0.50%	2.35%	2.58%	6.59%	6.14%	4.23%	5.95%	4.23%	5.95%	4.23%	5.95%
Commodities																
Invesco Balanced Risk Commodity Trust	Jun-16	Bloomberg Commodity Index	252	1.3%	0.56%	-0.46%	8.54%	4.24%	1.25%	0.54%	-0.91%	-1.80%	-0.91%	-1.80%	-0.91%	-1.80%
PIMCO Commodity Alpha Fund	May-16	Bloomberg Commodity Index	104	0.5%	1.36%	-0.46%	6.84%	4.24%	13.48%	0.54%	16.67%	0.99%	16.67%	0.99%	16.67%	0.99%
Total Commodities	May-16	Bloomberg Commodity Index	356	1.9%	0.79%	-0.46%	8.04%	4.24%	4.54%	0.54%	4.96%	0.99%	4.96%	0.99%	4.96%	0.99%
Opportunity Fund																
Alinda Capital Partners	Dec-09	CPI + 5% (3)	29	0.2%	0.20%	1.72%	-4.26%	6.63%	-4.26%	6.63%	4.41%	5.92%	6.02%	6.31%	5.35%	6.65%
Macquarie Infrastructure Partners II	Apr-10	CPI + 5% (3)	35	0.2%	1.93%	1.72%	2.76%	6.63%	2.76%	6.63%	3.07%	5.92%	6.89%	6.31%	8.12%	6.65%
Macquarie Infrastructure Partners III	Oct-14	CPI + 5% (3)	41	0.2%	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
<i>Infrastructure</i>	Dec-09	CPI + 5% (3)	105	0.5%	1.62%	1.72%	2.36%	6.63%	2.36%	6.63%	4.57%	5.92%	6.63%	6.31%	6.90%	6.65%
TOTAL OPPORTUNITY FUND	Jul-99	Custom	105	0.5%	0.19%	0.72%	3.78%	2.82%	2.16%	7.15%	5.01%	6.23%	7.29%	6.66%	9.02%	3.57%
TOTAL FUND																
TOTAL FUND ex-Overlay	Sep-14	Policy Portfolio	19,076	99.6%	1.29%	1.15%	6.25%	5.74%	16.46%	15.83%	6.70%	6.54%	9.17%	9.17%	5.74%	5.76%
Parametric Clifton Cash Overlay	Sep-14		79	0.4%	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
TOTAL FUND	Oct-81	Policy Portfolio	19,154	100.0%	1.30%	1.15%	6.25%	5.74%	16.56%	15.83%	6.69%	6.54%	9.17%	9.17%	5.74%	5.76%

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 (LIBOR + 5%) 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

SURS Projected Funding Status 2018 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-17	\$ 18.01	\$ 41.85	\$ 23.84	43.0%		
Jul-17	18.53	41.96	23.43	44.2%	1.74%	1.7%
Aug-17	18.45	42.07	23.62	43.9%	0.61%	2.4%
Sep-17	18.46	42.18	23.72	43.8%	1.19%	3.6%
Oct-17	18.81	42.29	23.47	44.5%	1.27%	4.9%
Nov-17	19.04	42.39	23.36	44.9%	1.30%	6.3%

Note: Assets and liabilities are estimated and unaudited through June 30, 2017.
The fund has an actuarial value funding ratio of 44.4% at the end of Fiscal Year 2017, utilizing a 7.25% assumed rate of return.