# BUILDING FUTURES

2017 COMPREHENSIVE ANNUAL FINANCIAL REPORT





The Comprehensive Annual Financial Report for Fiscal Year Ended June 30, 2017

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Building Futures
is not only the
theme of this
year's annual
report but
our long-term
objective at SURS.

#### A MESSAGE FROM OUR EXECUTIVE DIRECTOR

Our goal is to help members select the most appropriate retirement plan option for their needs, to encourage participation in payroll deduction programs offered by their employers, and to provide education on insurance, beneficiaries, reciprocity and Social Security benefits. We strive to provide sound information that will prepare members for a secure future with a lifetime of income.

We are currently working with legislators and the other state retirement systems to create the new optional hybrid retirement plan outlined in Public Act 100-23. This plan will include both a defined benefit and a defined contribution component and will be available to new hires and to existing Tier II members. The hybrid plan will not affect Tier I members, retirees or Self-Managed Plan members. When the plan is complete, we will provide detailed information to our affected members so they can make informed decisions about their retirement choices.

For the past six years, SURS has received 100% of our state funding and although the plan continues to be underfunded because we did not receive full contributions from the state in prior years, recent payments along with solid investment returns, allow us to build a stronger fund.

In 2017, the SURS portfolio delivered a net of fee return of 12.2%, approximately 50 basis points above the policy portfolio. From a long-term prospective, the SURS portfolio has performed well, earning an 8.2% annualized rate of return over the past 25 years, well in excess of both the policy portfolio return and the 7.25% assumed rate of return.

We continue to build and enhance our technology to provide better security and communications for our members. In 2017, we completed a major network infrastructure upgrade that included next-generation firewalls and endpoint security, allowing us to greatly increase our level of protection.

Our staff continues to receive glowing reviews from members and employers alike for their top-notch service, professionalism and knowledge. I would like to personally thank them for their hard work and dedication this past year.

At SURS, we have built a great team of professionals to manage your benefits. All of our efforts are with you and your retirement security in mind.

Martin Noven
Executive Director



Public Pension Coordinating Council

# Recognition Award for Administration 2017

Presented to

# State Universities Retirement System

In recognition of meeting professional standards for plan administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)

National Conference on Public Employee Retirement Systems (NCPERS)

National Council on Teacher Retirement (NCTR)

Alan H. Winkle Program Administrator





# INTRODUCTORY

- ☐ LETTER OF TRANSMITTAL
- ☐ BOARD OF TRUSTEES
- □ ADMINISTRATIVE STAFF
- ORGANIZATIONAL CHART
- CONSULTING AND PROFESSIONAL SERVICES

The Comprehensive Annual Financial Report for Fiscal Year Ended June 30, 2017



1901 Fox Drive, Champaign, IL 61820-7333 800-275-7877 • 217-378-8800 • (Fax) 217-378-9800 www.surs.org

December 12, 2017

Board of Trustees and Executive Director State Universities Retirement System 1901 Fox Drive Champaign, IL 61820

I am pleased to present the 76th Comprehensive Annual Financial Report for the State Universities Retirement System of Illinois (SURS or the System, a component unit of the State of Illinois) for the fiscal year ended June 30, 2017.

The System was established in 1941 for the benefit of the employees of the state universities, community colleges, and certain other state educational and scientific agencies, and the survivors, dependents, and other beneficiaries of those employees. Our vision is to continue to be a respected leader among public pension funds. The SURS staff works hard to perform at the highest customer service level for our members who dedicate their careers to education.

The management of SURS is responsible for the compilation and accuracy of the financial, investment, actuarial, and statistical information contained in this report. To the best of our knowledge and belief, the enclosed information is accurate in all material respects and is reported in a manner designed to present fairly the financial position and results of operations of SURS.

Management is responsible for establishing and maintaining adequate internal controls over financial reporting. SURS' internal controls over financial reporting are designed to provide reasonable assurance regarding safekeeping of assets and reliability of financial records in accordance with generally accepted accounting principles. These controls include appropriate segregation of duties and responsibilities, and sound practices in the performance of those duties. The cost of a control should not exceed the benefits likely to be derived. The valuation of costs and benefits requires estimates and judgments by management. The objective of internal controls is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements.

SURS maintains an internal audit program that employs the services of three internal auditors to determine that all controls implemented are as designed. The internal audit personnel use a detailed internal audit program to provide a continuing review of the SURS internal controls and to report audit findings and recommendations for improvements to the SURS Board of Trustees. There are inherent limitations in the effectiveness of any system of internal controls, including the possibility of human error and the circumvention or overriding of controls.

The Illinois Pension Code requires an annual audit of the financial statements of the System by independent accountants selected by the State Auditor General. This requirement has been complied with, and the independent auditor's unmodified report on the System's 2017 financial statements has been included in this report.

Accounting principles generally accepted in the United States of America require that management provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. The System's MD&A can be found on page 18 of the report.

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#### **Profile**

SURS is the administrator of a cost-sharing, multiple-employer public employee retirement system established July 21, 1941, to provide retirement annuities and other benefits for employees, survivors and other beneficiaries of those employees of the state universities, community colleges, and certain other state educational and scientific agencies. SURS services 61 employers and approximately 232,000 members and annuitants. The plans administered by SURS include a defined benefit plan established in 1941 and a defined contribution plan established in 1998. SURS is governed by an 11-member board of trustees that includes four members elected, two annuitants elected, and five members appointed by the governor, of which the chairperson is the appointed chair of the Illinois Board of Higher Education.

#### **Funding**

SURS is funded through contributions from non-employer, employer and employee contributions as well as investment earnings. The State of Illinois, a non-employer contributing entity, provides funding from two sources: the General Revenue Fund and the State Pensions Fund, which is funded with proceeds from unclaimed property. Annually, the SURS actuary determines the annual "Statutory Contribution" needed to meet current and future benefit obligations in accordance with the Illinois Pension Code, which sets forth the manner of calculating the statutory contribution under the Statutory Funding Plan. The Statutory Funding Plan requires the state to contribute annually an amount equal to a constant percent of pensionable (capped) payroll necessary to allow the System to achieve a 90% funded ratio by fiscal year 2045, subject to any revisions necessitated by actuarial gains or losses, or actuarial assumptions. The majority of the \$1.7 billion Statutory Contribution for fiscal year 2017 was received through continuing appropriation based on 40 ILCS 15/1.1(b). As of June 30, 2017, the plan net position as a percentage of the total pension liability was 42.04%. The funding issue confronting SURS continues to represent a challenge to the System. Although the statutory contribution requirement was met in fiscal year 2017, the Statutory Funding policy creates a perpetual contribution variance of underfunding the System in earlier years. In later years, the statutory contribution would exceed a contribution equal to normal cost plus a 30-year closed period level percent of pay amortization of the unfunded liability. Further information is presented in the Required Supplementary Information related to employer contributions and the funding of the plan.

#### Investments

Investments are made under the authority of the prudent expert rule, which states that fiduciaries must discharge their duties with the care, skill, prudence, and diligence that a prudent person acting in a like capacity and familiar with such matters would use under conditions prevailing at the time. This standard has enabled the System to invest in different types of asset classes seeking to increase return while lowering risk through diversification.

The System retains professional investment firms who serve as fiduciaries and are afforded full discretion to manage the assets entrusted to them in accordance with written policies and guidelines established by the board of trustees. Our goal is to optimize the long-term return of the System's investments.

The SURS defined benefit assets held in trust increased to \$18.5 billion. The "Investment" section of this report contains yield information, a summary of SURS' investment portfolio, and a summary of the investment objectives and policies. Taken as a whole, the SURS portfolio of investments produced a return of 12.2%, net of fees, for the year ended June 30, 2017. The SURS investment program has a long-term horizon. The returns, net of fees, are 5.0% over the last three years and 5.4% over the last 10 years. The SURS defined contribution (Self-Managed Plan) assets increased from \$1.8 billion to \$2.2 billion.

The SURS defined benefit plan assets show a positive return of 4.8% through October 31, 2017, bringing total investments to approximately \$18.8 billion.

#### Legislation

1) Public Act 99-0682, signed into law on July 29, 2016, allows eligible SURS retirees to restore their survivors insurance benefits by making a one-time irrevocable election to repay their survivors refund or additional annuity, along with interest compounded at the actuarially assumed rate of return. The full election must be made to SURS by the earlier of: 24 months after the date of the election or the

date of the retiree's death. Eligible retirees have one year, beginning December 29, 2016, to make this election.

- 2) Public Act 99-0683, signed into law on July 29, 2016, required SURS to develop and implement, by June 30, 2017, a process to identify deceased annuitants. It requires the System to check for deceased annuitants once per month and to use common methods such as a third party entity, data provided by the Social Security Administration or Illinois Department of Public Health's Office of Vital Records or use of any other method to identify deceased persons.
- 3) Public Act 99-0830, signed by the Governor on August 19, 2016, excludes individuals who begin employment with the following employers on or after January 1, 2017, from participation under SURS: certain associations of community college boards, the Association of Illinois Middle-Grade Schools, the Illinois Association of School Administrators, the Illinois Association for Supervision and Curriculum Development, the Illinois Principals Association, the Illinois Association of School Business Officials, the Illinois Special Olympics, and any entity not defined as an employer.
- 4) Public Act 99-0897, signed by the Governor on August 26, 2016, requires the SURS Board of Trustees to promulgate rules to determine whether a person is an employee covered under SURS and give the Board final determination as to whether a person is a SURS covered employee. It excludes amounts for bonuses, housing allowances, car allowances, social club dues, and athletic club dues from the calculation of pensions for employees who first become participants of SURS on and after January 1, 2017. It requires a participant, beneficiary, or annuitant to timely submit any information necessary for the calculation, payment, or finalization of a retirement, survivors, disability, or death benefit within 90 days of the System's request for such information. The System may cease processing the benefit and may not pay any additional benefit payment until the requested information is provided. It requires an employer to respond to a request from SURS for any information necessary for the proper administration of the System (including employment contracts) within 90 calendar days and to respond to a request pursuant to an employer audit conducted by the System within 60 calendar days. It also made changes related to furloughs and voluntary pay reductions of public higher education employees.

#### **Major Initiatives**

During fiscal year 2017, SURS staff has continued to enhance business processes and modernize technology.

- Completed Phase II of a multi-year infrastructure upgrade project to support increased bandwidth requirements and to position SURS for meeting the business requirements associated with increased video conferencing and telephony enhancements.
- The Department of Central Management Services (CMS) hired a third-party vendor to assist with
  the administration of the State Employees Group Insurance Programs by providing a new webbased enrollment website. Due to this transfer of responsibility, SURS implemented changes in order
  to receive monthly member insurance premium data to facilitate premium deductions from SURS
  retiree and survivor benefits.
- SURS published its first issue of an employer targeted newsletter, Employer Insight.
- A new, enhanced online claim status feature was added to the SURS member website allowing members to easily track the progress of their retirement claims by logging into their SURS account.

#### Awards and Recognition

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to SURS for its component unit financial report for the fiscal year ended June 30, 2016. This is the thirty-third consecutive year the System has earned this award.

SURS 2017 ANNUAL REPORT

To be awarded the Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized comprehensive annual financial report whose contents conform to program standards. The report must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only.

We believe our current report continues to conform to the Certificate of Achievement Program requirements, and we are submitting it to GFOA to determine its eligibility for another certificate.

The Public Pension Coordinating Council (PPCC), a coalition of three national associations that represents more than 500 of the largest pension plans in the U.S., awarded SURS the *Public Pension Standards Award for Funding and Administration*. Public Pension Standards are a benchmark to measure public defined benefit plans in the areas of retirement system management, administration, and funding.

#### **Acknowledgements**

This report was prepared through the combined effort of the SURS staff under the leadership of the Board of Trustees. It is intended to provide reliable information to its users for making decisions and for determining responsible stewardship for the assets contributed by the members and the State of Illinois.

The report is made available to the Governor, the State Auditor General, the members of the General Assembly, participating employers, and to other interested persons by request. We thank all those whose impact in Illinois' universities and colleges guide the future. We hope they will find this report informative. A copy of this report and our Annual Report Summary will be available on our website, www.surs.org.

Respectfully submitted,

Ohyllis L. Walker

Phyllis L. Walker

Chief Financial Officer

# **BOARD OF TRUSTEES**



**Tom Cross** Chairperson Appointed



**Dorinda Miller** Vice Chairperson Elected



**John Engstrom** Treasurer Elected



**Aaron Ammons** Elected



**Mark Cozzi** Appointed



**Dennis Cullen** Appointed



**J. Fred Giertz** Elected



Paul R. T. Johnson Jr. Appointed



**Craig McCrohon**Appointed



**Steven Rock** Elected



**Antonio Vasquez** Elected

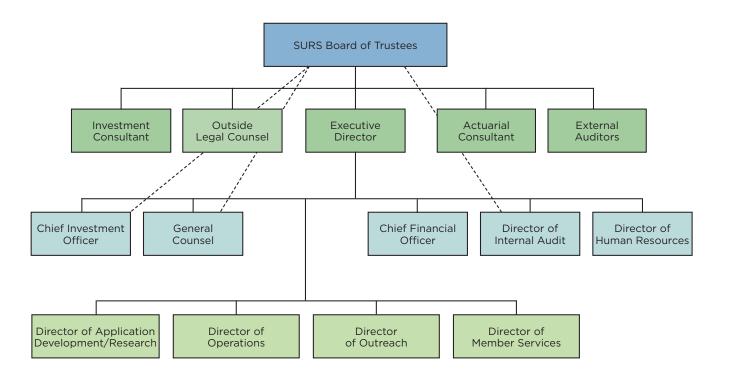
#### **ADMINISTRATIVE STAFF**



**Seated left to right:** Director of Operations Chris Hansen, Director of Human Resources Brenda Dunn and Director of Internal Audit Steven L. Hayward.

**Standing left to right:** Chief Investment Officer Douglas Wesley, Director of Outreach Suzanne Mayer, General Counsel Bianca T. Green, Executive Director Martin Noven, Director of Member Services Angie Lieb, Chief Financial Officer Phyllis Walker, and Director of Application Development and Research Douglas J. Steele.

#### ORGANIZATIONAL CHART



#### CONSULTING AND PROFESSIONAL SERVICES

#### Actuary

Gabriel, Roeder, Smith & Co.

#### **Auditor**

BKD, LLP (Acting as Special Assistant Auditor for the Illinois Office of Auditor General)

#### **Legal Counsel**

Burke, Burns & Pinelli, Ltd. Jackson Walker L.L.P.

#### **Consultants and Other Vendors**

A & R Mechanical Contractors
Document Access Systems
Express Service, Inc.
Mesirow Insurance Services
MRC Information Technology Inc.
Secureworks, Inc.
Sirius Computer Solutions
Upkeep Maintenance Service

#### **Master Trustee and Custodian**

Tave Risk Management

The Northern Trust Company

#### **Investment Consultants, Measurement and Counsel**

NEPC, LLC

#### **Investment Advisors**

Adams Street Partners
Alinda Capital Partners
BlackRock Institutional Trust Company
BlueBay Asset Management
Blue Vista Capital Management
Brookfield Asset Management
CastleArk Management

Colchester Global Investors Limited

Courtland Partners Crow Holdings Deutsche Bank

Dune Capital Management

Fidelity Institutional Asset Management Franklin Templeton Real Estate Advisors

Gladius Capital Management

Heitman Invesco

J.P. Morgan Asset Management

KKR Prisma Macquarie Capital

Mesirow Financial Investment Management

Mondrian Investment Partners

Neuberger Berman

Northern Trust Asset Management

Pacific Alternative Asset Management Company

Pacific Investment Management Company

Pantheon Ventures

Parametric Clifton

Progress Investment Management Company

Prudential Fixed Income

RhumbLine Advisers

RRFFF

State Street Global Advisors

T. Rowe Price

TCW

**UBS** Realty Investors

Wellington Management Company

#### **Manager Diversity Program Investment Advisors**

Ativo Capital Management Channing Capital Management

EARNEST Partners

Fairview Capital Partners

Franklin Templeton Real Estate Advisors

Garcia Hamilton & Associates

GlobeFlex Capital, L.P.

LM Capital Group

Muller and Monroe Asset Management

Piedmont Investment Advisors Pugh Capital Management Smith Graham & Company

Strategic Global Advisors

#### Progress Investment Management Company Emerging Manager Investment Advisors

Affinity Investment Advisors ARGA Investment Management Brown Capital Management

Denali Advisors

Garcia Hamilton & Associates

**GIA Partners** 

Glovista Investments LM Capital Group

New Century Advisors

Piedmont Investment Advisors Ramirez Asset Management

Strategic Global Advisors

#### **Self-Managed Plan Service Providers**

Fidelity Investments

Teachers Insurance Annuity Association

Schedule of Fees and Commissions can be found in the Investment Section Supporting Schedules, pages 74-76.



# FINANCIAL

- INDEPENDENT AUDITOR'S REPORT
- MANAGEMENT'S DISCUSSION AND ANALYSIS
- ☐ FINANCIAL STATEMENTS
- NOTES TO THE FINANCIAL STATEMENTS
- □ REQUIRED SUPPLEMENTARY INFORMATION
- NOTES TO REQUIRED SUPPLEMENTARY INFORMATION
- ☐ OTHER SUPPLEMENTARY INFORMATION

The Comprehensive Annual Financial Report for Fiscal Year Ended June 30, 2017

#### INDEPENDENT AUDITOR'S REPORT



225 N. Water Street, Suite 400 // Decatur, IL 62523-2326 \$ 217,429,2411 // fax 217,429,6109 // bkd.com

#### Independent Auditor's Report

Honorable Frank J. Mautino Auditor General State of Illinois and The Board of Trustees State Universities Retirement System of Illinois

#### Report on the Financial Statements

As Special Assistant Auditors for the Auditor General, we have audited the accompanying Statement of Plan Net Position of the State Universities Retirement System of the State of Illinois (System), a component unit of the State of Illinois, as of and for the year ended June 30, 2017, and the related Statement of Changes in Plan Net Position for the year then ended, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the System's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net position of the System as of June 30, 2017, and the respective changes in plan net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.



#### INDEPENDENT AUDITOR'S REPORT

#### Emphasis of Matter

The actuarially determined pension liability, calculated as required by GASB Statements No. 67, is dependent on several assumptions including the assumption that future required contributions from all sources are made based on statutory requirements in existence as of the date of this report. These assumptions are discussed in Note V of the financial statements. Our opinion is not modified with respect to this matter.

#### Other Matters

#### Prior Year Comparative Information

We have previously audited the System's 2016 financial statements, and we expressed an unmodified audit opinion in our report dated December 12, 2016. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2016, is consistent, in all material respects, with the audited financial statements from which it has been derived.

#### Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, the schedule of changes in the employer net pension liability and related ratios, the schedule of net pension liability, the schedule of contributions from employers and other contributing entities, the schedule of investment returns, and notes to the required supplementary information as listed in the table of contents be presented to supplement the financial statements. Such information, although not part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### Other Information

Our audit for the year ended June 30, 2017 was conducted for the purpose of forming an opinion on the System's basic financial statements. The other supplementary financial information in the financial section and the accompanying introductory, investment, actuarial, and statistical sections, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The other supplementary financial information in the financial section, as listed in the table of contents, has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America by us and other auditors. In our opinion, the other supplementary financial information in the financial section, as listed in the table of contents, is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

We have also previously audited, in accordance with auditing standards generally accepted in the United States of America, the System's financial statements as of and for the year ended June 30, 2016 (not presented herein), and have issued our report thereon dated December 12, 2016 which contained an unmodified opinion on those financial statements.

The introductory, investment, actuarial, statistical and plan summary and legislative sections, as listed in the table of contents, have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

BKD, LLP

Decatur, Illinois December 12, 2017

This section presents management's discussion and analysis of the State Universities Retirement System's (SURS or the System) financial statements and the major factors affecting the operations and investment performance of the System during the year ended June 30, 2017, with comparative reporting entity totals for the year ended June 30, 2016. Please read this section in conjunction with the Letter of Transmittal included in the Introductory Section, the financial statements, and other information that are presented in the Financial Section of the Comprehensive Annual Financial Report.

#### **Financial Highlights**

- Contributions from the State and employers were \$1,717.5 million, an increase of \$69.8 million, or 4.2% from fiscal year 2016.
- The System's benefit payments were \$2,383.8 million, an increase of \$102.0 million or 4.5% for fiscal year 2017.
- The System's return on investment, net of investment management fees, was 12.2% for fiscal year 2017.
- The System's net position at the end of fiscal year 2017 was \$20.7 billion, an increase of \$1.8 billion or 9.7%.

#### Overview of Financial Statements and Accompanying Information

The Financial Section is comprised of four components: (1) Financial Statements, (2) Notes to the Financial Statements, (3) Required Supplementary Information, and (4) Other Supplementary Information.

- The financial statements presented in this report are the Statement of Plan Net Position as of June 30, 2017 and the Statement of Changes in Plan Net Position for the year ended June 30, 2017. The difference between the System's assets and liabilities is defined as Plan Net Position. These statements present separate totals for the defined benefit plan and the Self-Managed Plan.
  - The Statement of Plan Net Position details the net position (assets less liabilities equals net position). The Statement of Plan Net Position reports the funds available to pay benefits.
  - The Statement of Changes to Plan Net Position presents the additions and deductions from the plan net position. Over time the increase or decrease in net position is a useful indicator of the health of SURS' financial position.
- The Notes to the Financial Statements are an integral part of the financial statements and provide facts and detailed information to assist the reader in understanding the statements. Disclosures include the description of the plan, summary of significant accounting policies, and detailed presentations of major assets and liabilities.
- Required Supplementary Information presents schedules related to employer net pension liability, employer contributions, and investment returns.
- Other Supplementary Schedules consist of detailed information supporting administrative and investment expenses, and fees paid to consultants.

#### General Market Risk

SURS is exposed to general market risk. This general market risk is reflected in asset valuations fluctuating with market volatility. Any impact from market volatility on SURS investment portfolios depends in large measure on how deep the market downturn is, how long it lasts, and how it fits within fiscal year reporting periods. The resulting market risk and associated realized and unrealized gains and losses could significantly impact SURS' financial condition.

#### Financial Analysis of the System

The State Universities Retirement System serves 209,978 members in its defined benefit plan and 21,888 members in its Self-Managed Plan. The funds needed to finance the benefits provided by SURS are accumulated through the collection of member and employer contributions and through income on investments. The total net position of the System increased from \$18.8 billion as of June 30, 2016 to \$20.7 billion as of June 30, 2017. This \$1.8 billion change was chiefly due to an increase in investments and an increase in securities lending collateral liabilities.

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#### Plan Net Position

The summary of plan net position for the System is presented below:

#### **Condensed Statement of Plan Net Position**

Reporting Entity Total (\$ in millions)	2017	2016	Ch	ange
			Amount	%
Cash and short-term investments	\$ 558.0	\$ 731.6	\$ (173.6)	(23.7)
Receivables and prepaid expenses	366.3	287.6	78.7	27.4
Pending investment sales	420.2	433.9	(13.7)	(3.2)
Investments and securities lending collateral	20,874.1	18,857.8	2,016.3	10.7
Capital assets, net	6.3	6.3	-	-
Total assets	22,224.9	20,317.2	1,907.7	9.4
Payable to brokers-unsettled trades	806.7	853.4	(46.7)	(5.5)
Securities lending collateral	704.4	602.1	102.3	17.0
Other liabilities	58.7	30.6	28.1	91.8
Total liabilities	1,569.8	1,486.1	83.7	5.6
Total plan net position	\$ 20,655.1	\$ 18,831.1	\$1,824.0	9.7

Overall, net position increased by \$1,824.0 million, or 9.7%, mainly due to the total investment income. The increase in receivables and prepaid expenses is largely due to the increase in the receivable from brokers for unsettled trades at fiscal year-end as a result of a larger number of trades outstanding for fiscal year 2017 compared to 2016.

The investment allocation strategy for the plans making up the reporting entity as of June 30, 2017, and 2016 is as follows:

#### **Investment Allocation Strategy**

	2017	2016
Defined Benefit Plan		
Equities	50.0%	50.0%
Fixed income	19.0	19.0
Real Estate Investment Trusts	4.0	4.0
Real estate	6.0	6.0
Private equity	6.0	6.0
Hedged strategies	5.0	5.0
Emerging market debt	3.0	3.0
Treasury Inflation Protected Securities	4.0	4.0
Commodities	2.0	2.0
Opportunity Fund	1.0	1.0
Total	100.0%	100.0%
Self-Managed Plan		
Equities	70.2%	68.7%
Fixed income	28.0	29.2
Real estate	1.8	2.1
Total	100.0%	100.0%

Proper implementation of the investment policy requires that a periodic adjustment, or rebalancing of assets be made to ensure conformance with policy target levels. Such rebalancing is necessary to reflect sizable cash flows and performance imbalances among investment managers who are hired to manage assets with a specified strategy. SURS' rebalancing policy calls for rebalancing, as soon as practical, if a strategy exceeds or falls below its target allocation by 3%. Ongoing rebalancing of the investment portfolio occurred as needed during the year with the assistance of System cash flows. The allocation of assets within the Self-Managed Plan is totally determined by the individual members, and also reflects gains or losses over the past year.

#### **Changes in Plan Net Position**

The summary of changes in plan net position for the System is presented below:

#### **Condensed Statement of Changes in Plan Net Position**

Reporting Entity (\$ in millions)	2017	2016	С	hange
			Amount	%
Employer contributions	\$ 46.0	\$ 46.2	\$ (0.2)	(0.4)
Non-employer contributing entity contributions	1,671.4	1,601.5	69.9	4.4
Member contributions	363.9	355.3	8.6	2.4
Net investment income	2,260.7	20.2	2,240.5	11,091.6
Total additions	4,342.0	2,023.2	2,318.8	114.6
Benefits	2,383.8	2,281.8	102.0	4.5
Refunds	118.9	111.6	7.3	6.5
Administrative expense	15.3	15.2	0.1	0.7
Total deductions	2,518.0	2,408.6	109.4	4.5
Net increase (decrease) in plan net position	<u>\$ 1,824.0</u>	<u>\$ (385.4)</u>	\$ 2,209.4	573.3

#### Additions

Additions to plan net position are in the form of employer and member contributions and returns on investment funds. For fiscal year 2017, non-employer contributing entity contributions increased by \$69.9 million due to higher employer contributions from the State of Illinois as required by Public Act 88-0593. Employer contributions decreased by \$0.2 million or 0.4%. Member contributions increased by \$8.6 million or 2.4%. The investment net income for fiscal year 2017 was \$2,260.7 million for the System, representing a \$2.2 billion increase from the prior year. For the defined benefit plan, the overall rate of return was 12.2% (net of all investment management fees).

Given the long-term orientation of the SURS defined benefit investment program, it is important to track investment returns over several time periods to correctly assess performance, especially given recent market volatility. The defined benefit plan returns are as follows:

Time Period	1-year	3-year	5-year	10-year	20-year	30-year	
Annualized Return	12.2%	5.0%	9.0%	5.4%	6.9%	8.3%	

The total rate of return over a 30-year period of 8.3% was higher compared to the actuarial rate of return assumption of 7.25% in effect for fiscal year 2017. Under the direction of the Illinois Auditor General, the State Actuary recommends that the Board annually review the interest rates, payroll growth, and inflation assumption should changes in market conditions or plan demographics call for such an adjustment. Public Act 99-0232 signed August 2015 will require SURS to have an experience study performed by the System actuaries every three years.

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#### Deductions

The expenses of the Retirement System relate to the provision of retirement annuities and other benefits, refunds to terminated employees, and the cost of administering the System. These expenses for fiscal year 2017 totaled \$2.5 billion, an increase of \$109.4 million or 4.5% over expenses for 2016. This increase is primarily due to the \$102.0 million increase in defined benefit plan and defined contribution plan retirement and survivor annuity payments. Portable lump sum distributions and refunds increased by \$7.3 million or 6.5%. Administrative expenses increased by \$0.1 million or 0.7% from fiscal year 2016 to 2017.

#### **Future Outlook**

The actuarial assumptions adopted as of June 30, 2016 were based on the experience review for the years June 30, 2010 to June 30, 2014. Public Act 96-0889 caps Tier 2 members' earnings at \$111,572 in 2017 and future cost of living adjustments at the lesser of 3% or 0.5% of the increase in the Consumer Price Index. This modification of Tier 2 members' earnings decreases the anticipated amount of future payroll and contributions.

The employer contributions for fiscal year 2018, mainly provided by the State of Illinois, will decrease by approximately \$41.6 million or 2.4% due to Public Act 100-0023. Public Act 100-0023 requires the System to recertify its fiscal year 2018 contribution with the following provisions: (1) a requirement that the actual employer contribute the employer normal cost on the portion of an employee's earnings in excess of the Governor's salary; (2) a 5-year phase-in of the cost or savings of any changes in actuarial assumptions made since valuation year 2012 (or Fiscal Year 2014); and (3) an Optional Hybrid Plan, to be paid for by the actual employer.

Benefit payments are projected to continue to grow at a rate of approximately 7 - 8% annually as a result of increasing numbers of retirees, the 3% annual increase, and the impact of salary increases at the participating agencies. SURS will continue to structure its portfolio with the objective of maximizing returns over the long term to help offset the shortage in employer contributions.

#### **Requests for Information**

This financial report is designed to provide a general overview of the System's finances. For questions concerning the information in this report or for additional information, contact State Universities Retirement System, 1901 Fox Drive, Champaign, Illinois 61820.

# FINANCIAL STATEMENTS

# Statement of Plan Net Position as of June 30, 2017 With Comparative Reporting Entity Totals as of June 30, 2016

		2017		2016
	Defined Benefit	Self-Managed		
	Plan	Plan	Total	Total
Assets				
Cash and short-term investments	\$ 557,956,107	\$ -	\$ 557,956,107	\$ 731,633,307
Receivables				
Members	7,374,776	3,645,343	11,020,119	11,901,631
Non-employer contributing enti-	ty 305,964,391	1,793,737	307,758,128	231,780,027
Federal, trust funds, and other	1,596,522	13,451	1,609,973	1,470,551
Pending investment sales	420,174,075	-	420,174,075	433,893,516
Interest and dividends	45,835,923		45,835,923	42,366,778
Total receivables	780,945,687	5,452,531	786,398,218	721,412,503
Prepaid expenses	122,532	-	122,532	133,157
Investments, at fair value				
Equity investments	9,924,881,994	73,654,290	9,998,536,284	9,019,079,231
Fixed income investments	4,738,512,276	33,589,051	4,772,101,327	4,689,949,900
Real estate investments	1,040,488,876	2,659,777	1,043,148,653	988,848,965
Alternative investments	2,300,256,513	2,121,509	2,302,378,022	1,833,916,328
Mutual fund and variable annuities	-	2,052,773,940	2,052,773,940	1,723,653,945
Total investments	18,004,139,659	2,164,798,567	20,168,938,226	18,255,448,369
Securities lending collateral	705,137,291	-	705,137,291	602,404,484
Capital assets, at cost,				
net of accum depreciation				
\$19,170,764 and \$19,100,014				
respectively	6,312,533	-	6,312,533	6,249,153
Total assets	20,054,613,809	2,170,251,098	22,224,864,907	20,317,280,973
Liabilities				
Benefits payable	9,533,649	-	9,533,649	9,645,900
Refunds payable	5,513,152	-	5,513,152	6,459,653
Securities lending collateral	704,387,453	-	704,387,453	602,089,896
Payable to brokers for	806,727,942	-	806,727,942	853,366,668
unsettled trades				
Reverse repurchase agreements	28,484,875	-	28,484,875	
Administrative expenses payabl	e 15,147,160	-	15,147,160	14,583,115
Total liabilities	1,569,794,231		1,569,794,231	1,486,145,232

The accompanying notes are an integral part of the financial statements.

## FINANCIAL STATEMENTS

Statement of Changes in Plan Net Position for the Year Ended June 30, 2017 With Comparative Reporting Entity Totals for the Year Ended June 30, 2016

		2017		2016
	Defined Benefit	Self-Managed		
	Plan	Plan	Total	Total
Additions				
Contributions				
Employer	\$ 38,386,209	\$ 7,655,336	\$ 46,041,545	\$ 46,184,587
Non-employer contributing				
entity	1,612,164,501	59,261,499	1,671,426,000	1,601,480,000
Member	278,642,830	85,216,857	363,859,687	355,341,100
Total Contributions	1,929,193,540	152,133,692	2,081,327,232	2,003,005,687
Investment Income				
Net appreciation				
in fair value of investments	1,701,562,779	266,349,915	1,967,912,694	(256,708,352)
Interest	114,131,741	-	114,131,741	113,996,822
Dividends	236,551,585	-	236,551,585	220,725,192
Securities lending	5,885,222	-	5,885,222	4,215,195
	2,058,131,327	266,349,915	2,324,481,242	82,228,857
Less investment expense				
Asset management expense	63,291,609	-	63,291,609	61,614,201
Securities lending expense	529,670		529,670	379,368
Net investment income	1,994,310,048	266,349,915	2,260,659,963	20,235,288
Total additions	3,923,503,588	418,483,607	4,341,987,195	2,023,240,975
Deductions				
Benefits	2,339,897,357	43,922,036	2,383,819,393	2,281,769,695
Refunds of contributions	89,569,617	29,359,642	118,929,259	111,646,866
Administrative expense	14,847,009	456,599	15,303,608	15,210,543
Total deductions	2,444,313,983	73,738,277	2,518,052,260	2,408,627,104
Net increase (decrease)	1,479,189,605	344,745,330	1,823,934,935	(385,386,129)
Plan Net Position				
Beginning of year	17,005,629,973	1,825,505,768	18,831,135,741	19,216,521,870
Plan Net Position End of Year	\$ 18,484,819,578	\$ 2,170,251,098	\$ 20,655,070,676	\$ 18,831,135,741

The accompanying notes are an integral part of the financial statements.

#### I. Description of SURS

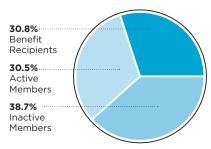
The State Universities Retirement System (SURS or the System) is the administrator of a cost-sharing, multiple-employer defined benefit plan and a multiple-employer defined contribution plan. The SURS Board of Trustees consists of six elected and five appointed board members. Legislation effective January 1, 1998, required SURS to introduce a portable benefit package to the existing defined benefit plan and to offer a defined contribution plan. The portable benefit package and the defined contribution plan are available to all members whose employers elect to make the options available. As of June 30, 2017, the two options available in the defined benefit plan are the traditional benefit package and the portable benefit package. The defined contribution plan is known as the Self-Managed Plan. The membership, contributions, and benefit provisions related to these plans are presented in the following summary of the provisions of SURS in effect as of June 30, 2017, as defined in the Illinois Compiled Statutes. Interested parties should refer to the SURS Member Guide or the statutes for more complete information.

#### A. Defined Benefit Plan

SURS was established on July 21, 1941, to provide retirement annuities and other benefits for employees of the state universities, certain affiliated organizations and certain other state educational and scientific agencies and for survivors, dependents, and other beneficiaries of such employees.

SURS is included in the State of Illinois' comprehensive annual financial report as a component unit. SURS is governed by Chapter 40, Act 5, Article 15, of the *Illinois Compiled Statutes*. These statutes assign the authority to establish and amend the benefit provisions of the plan to the State Legislature. Operation of the System and the direction of its policies are the responsibility of the Board of Trustees of the System. It is also these statutes that define the scope of SURS' reporting entity. There are no statutory provisions for termination of the System. The Illinois Constitution provides that the pension obligation of the State shall be an enforceable contractual relationship, the benefits of which shall not be diminished or impaired.





#### 1. Membership

Participation is required as a condition of employment. Employees are ineligible to participate if (a) employed less than full-time and attending classes with an employer; (b) receiving a retirement annuity from SURS; or (c) excluded by subdivision (a)(7)(f) or (a)(19) of Section 210 of the Federal Social Security Act from the definition of employment given in that Section.

	2017	2016
Universities	9	9
Community Colleges	39	39
Allied Agencies	11	11
State Agencies	2	2
	61	61

Note: Excluded from the employer totals above is the State of Illinois, a non-employer contributing entity.

At June 30, 2017 and 2016, defined benefit plan membership consisted of:

	2017	2016
Benefit Recipients	64,545	63,146
Active Members	64,117	66,245
Inactive Members	81,316	79,495
	209,978	208,886

#### 2. Benefit Provisions

A traditional benefit plan was established in 1941. Public Act 90-0448 was enacted effective January 1, 1998, which established an alternative defined benefit program known as the portable benefit package. This option is offered in addition to the traditional benefit option. The traditional and portable plan Tier 1 refers to members who began participation prior to January 1, 2011. Public Act 96-0889 revised the traditional and portable benefit plans for members who begin participation on or after January 1, 2011, and who do not have other eligible Illinois reciprocal system services. The revised plan is referred to as Tier 2. New employees are allowed 6 months after their date of hire to make an irrevocable election. The following is a summary of the benefit provisions as of June 30, 2017.

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	Traditional Plan - Tier 1	Traditional Plan - Tier 2	Portable Plan
Retirement Vesting	5 years of service	10 years of service	5 years of service (Tier 1) and 10 years of service (Tier 2)
Retirement Age Requirement	Age 62, with at least 5 years Age 60, with at least 8 years At any age with at least 30 years	Age 67, with at least 10 years of service	Tier 1-Same as Traditional Plan Tier 1 Age Requirement Tier 2-Same as Traditional Plan Tier 2 Age Requirement
Final Rate of Earnings (FRE)	<ul> <li>Average earnings during 4 highest consecutive academic years; or</li> <li>Average of the last 48 months prior to termination.</li> </ul>	Average earnings during 8 high consecutive academic years of the last 10; or     Average of the high 96 consecutive months of last 120 months (if applicable).	Tier 1-Same as Traditional Plan Tier 1 FRE Tier 2-Same as Traditional Plan Tier 2 FRE
Retirement Benefit AAI (Automatic Annual Increase)	The AAI is 3% compounded annually.	The AAI is calculated using the lesser of 3% or one-half of the consumer price index. The increase will not be compounded.	Tier 1-Same as Traditional Plan Tier 1 AAI Tier 2-Same as Traditional Plan Tier 2 AAI
Survivor Benefits	An eligible survivor receives a minimum of 50% of the member's earned retirement annuity.	An eligible survivor receives 66 <sup>2</sup> / <sub>3</sub> % of the member's earned retirement annuity.	Based upon selection at retirement of 50%, 75% or 100% of the member's earned retirement annuity.
Survivor AAI (Automatic Annual Increase)	The AAI is 3%, compounded annually.	The AAI is calculated using the lesser of 3% or one-half of the consumer price index. The increase will not be compounded.	Tier 1-Same as Traditional Plan Tier 1 Survivor AAI  Tier 2-Same as Traditional Plan Tier 2 Survivor AAI

SURS also provides disability, death, and refund benefits as authorized in Chapter 40, Act 5, Article 15, of the *Illinois Compiled Statutes*.

Disability benefits are payable to all members with at least 2 years of service credit if they are unable to reasonably perform the duties of their assigned position due to a physical or mental impairment as certified by a physician. The benefit becomes payable when sick leave payments are exhausted or after 60 days of the disability, whichever is later. The benefit is payable at a rate of 50% of the monthly rate of compensation on the date the disability began. Disability benefits are reduced by any payments received under the Workers' Compensation or the Occupational Diseases Act. If a member remains disabled after receiving the maximum benefits due, they may be eligible for a disability retirement annuity equal to 35% of the monthly rate of compensation on the date the disability began.

Death benefits are payable to named beneficiaries upon the death of any member of this System. Under the traditional benefit package, monthly survivor benefits may be paid to eligible survivors if the member established a minimum of 1.5 years of service credit prior to the date of death. If no qualified survivor exists at the date of retirement, the member is paid a refund of all survivor contributions plus interest. Under the portable benefit package, survivor benefits are available through a reduction of the retirement annuity calculated as described above. No refund of survivor contributions is available if there is no qualified survivor at the time of retirement. These provisions are designed to allow the impact of the portable benefit package's enhanced refund opportunity to be cost neutral.

Upon the death of an annuitant, SURS will pay either a death benefit to a non-survivor beneficiary or a monthly survivor benefit to an eligible survivor. The amount of the monthly survivor benefit will differ depending upon whether the annuitant had selected the traditional benefit package or the portable benefit package.

Upon termination of service, a lump sum refund is available to all members. Under the traditional benefit package, this refund consists of all member contributions and interest at 4-1/2%. Under the portable benefit package, this refund consists of all member contributions and total interest credited, plus for those members with greater than or equal to 5 years of service credit, an equal amount of employer contributions. Under both defined benefit plan options, a member with 5 or more years of service credit who does not apply for a refund may apply for a normal retirement benefit payable at age 62.

#### B. Self-Managed Plan

SURS is the plan sponsor and administrator of a defined contribution plan established as of January 1, 1998, by the Illinois General Assembly as an amendment to the Illinois Pension Code through Illinois Public Act 90-0448. This plan is referred to as the Self-Managed Plan (SMP) and is offered to employees of all SURS employers who elect to participate. This plan is a qualified money purchase pension plan under Section 401(a) of the Internal Revenue Code. The assets of the SMP are maintained under a trust administered by the SURS Board of Trustees in accordance with the Illinois Pension Code, and are made up of the account balances of individual members.

At June 30, 2017 and 2016, the number of SMP participating employers was:

	2017	2016
Universities	9	9
Community Colleges	39	39
Allied Agencies	8	8
State Agencies	2	2
	58	58

At June 30, 2017 and 2016, the SMP membership consisted of:

	2017	2016
Benefit Recipients	533	557
Active Members	11,852	11,880
Inactive Members	9,503	9,041
	21,888	21,478

Note: Excluded from the employer totals above is the State of Illinois, a non-employer contributing entity.

#### 1. Membership

A member may elect participation in the SMP if (a) all participation criteria for the defined benefit plan are met; (b) the employer has elected through Board action to offer the Self-Managed Plan; (c) the employee is on active status at the plan offering date; and (d) the employee is not eligible to retire as of the employer plan offering date. The member election is irrevocable. New employees are allowed 6 months from the date of hire in which to make their election. If no election is received, members are considered to be part of the defined benefit plan, under the traditional benefit option.

#### 2. Benefit Provisions

The SMP provides retirement, disability, death, and survivor benefits as authorized in Chapter 40, Act 5, Article 15, of the *Illinois Compiled Statutes*, and amended by Public Act 90-0448.

Retirement benefits are payable to members meeting minimum vesting requirements of 5 years of service credit at age 62, 8 years of service credit at age 55, or 30 years of service credit regardless of age. The distribution options available upon reaching retirement eligibility are the following: a lump sum distribution consisting of all employee and employer contributions and related investment earnings; a single life annuity; a 50% or 100% joint and survivor annuity; a single life annuity with a guaranteed period of 10, 15, or 20 years as elected by the member; and a 50% or 100% joint and survivor annuity with a guaranteed period of 10, 15, or 20 years as elected by the member.

Disability benefits are payable to all members with at least 2 years of service credit if they are unable to reasonably perform the duties of their assigned position due to physical impairment as certified by a physician. The benefit becomes payable when sick leave payments are exhausted or after 60 days of the disability, whichever is later. The benefit is payable at a rate of 50% of the monthly rate of compensation on the date the disability began. Disability benefits are reduced by any payments under Workers Compensation or the Occupational Diseases Act.

Upon termination of service with less than 5 years of service credit, a lump sum distribution is available which consists of employee contributions and related investment earnings. The employer contributions and related investment earnings are forfeited. Upon termination of service with greater than 5 years of service credit but where the member is not yet eligible for retirement, a lump sum distribution is available which consists of employee and employer contributions and related investment earnings.

Death benefits are payable to named beneficiaries upon the death of any member of this plan. If the member has less than 1.5 years of service credit, the death benefit payable is the employee contributions and related investment earnings. If the member has 1.5 or more years of service credit, the death benefit payable is the employee and employer contributions and related investment earnings.

#### II. Summary of Significant Accounting Policies

#### A. Reporting Entity

The System is a component unit of the State of Illinois. As defined by accounting principles generally accepted in the United States of America established by the Governmental Accounting Standards Board (GASB), the financial reporting entity consists of a primary government, as well as its component units, which are legally separate organizations for which the elected officials of the primary government are financially accountable, or for which the nature and significance to the primary government are such that exclusion would cause the reporting entity's financial statements to be misleading or otherwise incomplete. Financial accountability is defined as:

- 1. Appointment of a voting majority of the organization's board and either (a) the ability to impose will by the primary government or (b) the possibility that the organization will provide a financial benefit to or impose a financial burden on the primary government; or
- 2. Fiscal dependency on the primary government and there is a potential for the organization to provide specific financial benefits to, or impose specific financial burdens on, the primary government. Based upon the required criteria, the System has no component units.

#### B. Measurement Focus and Basis of Accounting

For both the defined benefit plan and the Self-Managed Plan (SMP), the financial transactions are recorded using the economic resources measurement focus and accrual basis of accounting. Member and employer contributions are recognized as revenue when due pursuant to statutory or contractual requirements. Benefits and refunds are recognized as expenses when due and payable in accordance with the terms of the plans.

#### C. Use of Estimates

The preparation of the System's financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and changes therein, and disclosure of contingent assets and liabilities. Actual results could differ from those estimates and those differences could be material. The System uses an actuary to determine the actuarial accrued liability for the defined benefit plan and to determine the actuarially determined contribution.

#### D. Risks and Uncertainties

The System invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market, and credit risk. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near-term and those such changes could materially affect the amounts reported in the Statement of Plan Net Position.

#### E. Cash and Short-Term Investments

Included in the \$557,956,107 of cash and short-term investments presented in the Statement of Plan Net Position is \$80,316,163 of short-term investments with original maturities less than 90 days. For purposes of the various data tables presented in Note IV, this group of short-term investments is included as part of fixed income investments. Short-term investments are generally reported at cost, which approximates fair value.

#### F. Investments

Investments are governed by Chapter 40, Act 5, Articles 1 and 15, of the *Illinois Compiled Statutes*. The most important aspect of the statutes is the prudent expert rule, which establishes a standard of care for all fiduciaries. (A fiduciary is any person who has authority or control with respect to the management or administration of plan assets.) The prudent expert rule states that fiduciaries must discharge their duties with the care, skill, prudence, and diligence that a prudent person acting in a like capacity and familiar with such matters would use under conditions prevailing at the time. Purchases and sales of securities are recorded on a trade-date basis. Interest income is reported on the accrual basis. Dividends are recorded on the ex-dividend date.

For the defined benefit plan, investments are generally reported at fair value. Marketable securities (stocks, bonds, warrants, and options) are traded on public exchanges. The Northern Trust Company, SURS' custodial bank, establishes these prices using third-party pricing services. Generally, these values are reported at the last reported sales price. Certain investments that do not have an established market value are reported at estimated fair value obtained from a custodial bank or investment management firm. These investments include commingled investment pools, where the underlying assets are individually marked to market (i.e., estimated fair value) on a daily basis and individually traded on publicly recognized exchanges. The investment manager, using methods approved by the Chartered Financial Analyst (CFA) Institute (formerly known as the Association for Investment Management Research) or other industry standards, values non-marketable securities (real estate and private equity). These methods generally include detailed property level appraisals and discounted cash flow analysis.

For the SMP, investments are reported at fair value by the service providers. These investments include both mutual and variable annuity funds where the underlying assets are marked to market (i.e., estimated fair value) on a daily basis and individually traded on publicly recognized exchanges. Generally, the values on the underlying investments are reported at the last reported sales price.

#### G. Capital Assets

Capital assets are recorded at historical cost and depreciated over the estimated useful life of each asset. Annual depreciation is computed using the straight-line method.

#### H. Administrative Expenses

System administrative expenses (which include amounts for both the defined benefit and defined contribution (self-managed) plans) are budgeted and approved by the System's Board of Trustees. Funding for these expenses is included in the non-employer contribution as determined by the annual actuarial valuation and appropriated by the State of Illinois.

#### I. Prior Year Comparative Information

The financial statements include certain prior-year summarized comparative information in total, but not at the level of detail required for a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the System's financial statements as of and for the year ended June 30, 2016, from which the summarized comparative information was derived.

#### J. New Accounting Pronouncements

GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, was effective for financial reporting periods beginning after June 15, 2016. This Statement established rules on reporting OPEB plans administered as trusts that provide benefits on behalf of governmental entities. This Statement did not have a material impact on the System's financial statements.

GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, will be effective for financial reporting periods beginning after June 15, 2017. This statement outlines reporting by governments that provide OPEB to their employees and for governments that finance OPEB for employees of other governments. This Statement is not expected to have a material impact on the System's financial statements.

GASB Statement No. 82, *Pension Issues*, was effective for financial reporting periods beginning after June 15, 2016. The objective of this Statement was to address certain issues that had been raised with respect to GASB Statements No. 67, 68 and 73. Specifically, this Statement addressed issues regarding (1) the presentation of payroll-related measures in required supplementary information, (2) the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and (3) the classification of payments made by employers to satisfy employee (plan member) contribution requirements. This Statement was implemented for the System with its year ending June 30, 2017.

GASB Statement No. 83, *Certain Asset Retirement Obligations*, is effective for financial reporting periods after June 15, 2018. The objective of this Statement is to address accounting and financial reporting for certain asset retirement obligations (AROs). SURS does not fall within the scope of Statement No. 83; therefore there is no impact on its financial statements.

GASB Statement No. 84, *Fiduciary Activities*, is effective for financial reporting periods beginning after December 15, 2018. The objective of this Statement is to improve guidance regarding the identification

of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. SURS does not fall within the scope of Statement No. 84; therefore there is no impact on its financial statements.

GASB Statement No. 85, *Omnibus 2017*, is effective for financial reporting periods beginning after June 15, 2017. This Statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and post-employment benefits (pensions and other post-employment benefits [OPEB]). Where applicable, SURS will adopt GASB Statement No. 85 for its June 30, 2018, financial statements.

GASB Statement No. 86, *Certain Debt Extinguishment Issues*, is effective for financial reporting periods beginning after June 15, 2017. The objective of this Statement is to improve consistency in accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources (resources other than the proceeds of refunding debt) are placed in an irrevocable trust for the sole purpose of extinguishing debt. SURS does not fall within the scope of Statement No. 86; therefore, there is no impact on its financial statements.

GASB issued Statement No. 87, *Leases*, is effective for financial reporting periods beginning after December 15, 2019. The objective of this Statement is to improve the accounting and financial reporting for leases by governments. This statement will require recognition of certain lease assets and liabilities for leases that previously were categorized as operating leases and recognized as inflow of resources or outflows of resources based on the payment provisions of the contract. This Statement is not considered to have a material impact on the System's financial statements.

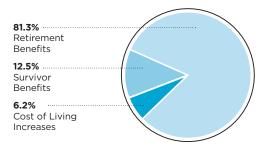
#### III. Contributions and Plan Net Position Designations

#### A. Defined Benefit Plan

#### 1. Membership Contributions

In accordance with Chapter 40, Act 5, Article 15, of the *Illinois Compiled Statutes*, members of the traditional benefit package contribute 8% of their gross earnings; 6-1/2% of those are designated for retirement annuities, 1/2% for post-retirement increases, and 1% for survivor benefits. Police officers and fire fighters contribute 9-1/2% of earnings; the additional 1-1/2% is a normal retirement contribution. Members of the portable benefit package

#### **Member Contributions**



contribute 8% of their gross earnings; 6-1/2% of those are designated for retirement annuities, 1/2% for post-retirement increases, and 1% for enhanced refund benefits. Police officers and fire fighters contribute 9-1/2% of earnings; the additional 1-1/2% is a normal retirement contribution. These Statutes assign the authority to establish and amend the contribution provisions of the plan to the State Legislature. The member contributions are picked up by the employer and treated as employer contributions for income tax purposes. Retirement contributions are based on the gross earnings before the employer pick-up and are included in earnings. All contributions on pre-1981 earnings and service credit payments, plus future other public employment, prior service, refund repayments, leave payments, military service payments, and the employee portion of Early Retirement Option payments are considered as previously taxed, unless qualifying funds are rolled over to SURS to make these purchases, or unless the payments are made in installments through employer deductions from payroll. Previously taxed contributions will be recovered tax-free when distributed to the employee in the form of benefits or payments or to his or her beneficiary as a death and/or survivor benefit.

#### 2. Interest Credited on Member Contributions

For the traditional and portable benefit packages, the interest rate credited is fixed by the Board of Trustees and is 7.0% for the year ended June 30, 2017. For purposes of lump sum refunds to former members, the traditional benefit package offers an interest rate of 4.5%, compounded annually, and the

portable benefit package offers an interest rate equal to the credited rate, compounded annually. A change brought forth by the enactment of Public Act 94-0004 and effective July 1, 2005, calls for the Comptroller of the State of Illinois to set the interest rate credited to member contribution balances for purposes of the calculation of retirement annuities under the money purchase formula. That rate is 6.75% for the year ended June 30, 2017 and 6.50% for the year ended June 30, 2018.

Members certified after July 1, 2005 will not be eligible for the money purchase formula calculation. Rather, their retirement annuity will be calculated using the general formula.

#### 3. Employer Contributions

On an annual basis, an actuarial valuation is performed in order to determine the amount of statutorily required contributions from the State of Illinois (non-employer contributing entity) and the normal cost for employers. Public Act 99-0232 requires an actuarial experience study is performed every 3 years to determine the assumptions to be used in the annual valuation. The last actuarial experience study was performed in February 2015. To determine the funding method, Public Act 88-0593 was passed by the Illinois General Assembly in 1994. This Act, which took effect on July 1, 1995, provides a 50-year schedule of State contributions to the System designed to achieve a 90% funded ratio by fiscal year 2045. This plan requires the State as the non-employer contributing entity to make continuing appropriations to meet the normal actuarially-determined cost of the System, plus amortize the unfunded accrued liability. The fiscal year 2017 State contributions were \$1,612,164,501 for the defined benefit plan and \$59,261,499 for the Self-Managed Plan. The employer normal cost calculation is based on the same actuarial results, assumptions and methods used to calculate the State contribution. This is the employer contribution rate that is to be applied to all earnings paid from federal, grant and trust funds. The Board of Trustees of the State Universities Retirement System has adopted 12.53% of covered earnings as the employer normal cost for fiscal year 2017. In compliance with Public Act 94-0004, employers must pay the System the present value of the increase in benefits resulting from the portion of the increase in earnings that is in excess of 6%. The fiscal year 2017 employer defined benefit contributions were \$38,386,209.

#### 4. Net Position Accounts

The System maintains two designated accounts that reflect the assignment of net position to employee and benefit accounts:

- a. The Employee Contribution Account records the pension assets contributed by each employee and the interest income earned by those contributions.
- b. The Benefits from Employee and Employer Contributions Account records the net position available for annuities in force and available for future retirement, death and disability benefits, the undistributed investment income, the unexpended administrative expense allocation, and the variations in actuarial assumptions.

Balances in these designated accounts as of June 30, 2017 are as follows:

 Employee contributions
 \$ 6,348,771,035

 Benefits from employee and employer contributions
 12,136,048,543

 Total net position
 \$ 18,484,819,578

#### 5. Ownership of Greater than 5 Percent of Net Position Available for Benefits

There are no significant investments in any one organization that represent 5% or more of plan net position available for benefits.

#### B. Self-Managed Plan

#### 1. Membership Contributions

In accordance with Chapter 40, Act 5, Article 15, of the *Illinois Compiled Statutes*, members contribute 8% of their gross earnings. These statutes assign the authority to establish and amend the contribution provisions of the plan to the State Legislature.

The member contributions are picked up by the employer and treated as employer contributions for income tax purposes. Retirement contributions are based on the gross earnings before the employer pick-up and are included in earnings.

Service credit purchase payments are considered as previously taxed, unless qualifying funds are rolled over to SURS to make these purchases. Previously taxed contributions will be recovered tax-free when distributed to the employee in the form of benefits or refunds, or to his or her beneficiary as a death and/or survivor benefit.

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#### 2. Employer Contributions

The State of Illinois (non-employer contributing entity) shall make the employer contribution to SURS on behalf of SMP employers on a monthly basis in accordance with the applicable provisions of the Illinois Pension Code. The fiscal year 2017 defined contribution plan State contributions were \$59,261,499 and employer contributions were \$7,655,336. In accordance with Chapter 40, Act 5, Article 15, of the *Illinois Compiled Statutes*, employer contributions credited to the SMP participant are at a rate of 7.6% of the member's gross earnings, less the amount retained by SURS to provide disability benefits (0.3% as of July 1, 2015).

#### 3. Net Position Accounts

The SMP maintains three designated accounts that reflect the assignment of net position to employee contributions, disability benefits, and employer forfeiture accounts:

- a. The Employee Contribution Account records the pension assets contributed by each employee and the corresponding employer contribution, and the investment income earned by those contributions.
- b. The Disability Benefits Account reflects the pension assets contributed by the employer and held to fund member disability benefits.
- c. The Employer Forfeiture Account reflects the pension assets contributed by the employer but forfeited from member accounts due to termination prior to reaching 5 years of service. Future employer contributions are reduced by the total forfeitures held by the defined contribution plan.

The assets related to disability benefits and employer forfeitures are commingled with the investment assets of the defined benefit plan. Investment income or loss is credited to these balances based upon the annual investment return or loss of the commingled assets. For fiscal year 2017, the investment income credited to these balances was \$11,013,349.

Balances in these designated accounts as of June 30, 2017 are as follows:

 Employee contributions
 \$ 2,058,222,097

 Disability benefits
 98,664,952

 Employer forfeitures
 13,364,049

 Total net position
 \$ 2,170,251,098

#### 4. Ownership of Greater than 5 Percent of Net Position Available for Benefits

There are no significant investments in any one organization that represent 5% or more of plan net position available for benefits. .

#### IV. Deposits and Investments

#### Fair Value Measurement

The System categorizes the fair value measurements of its investments based on the hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure an asset's fair value: Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs. Investments that are measured at fair value using the net asset value (NAV) per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy.

In instances where inputs used to measure fair value fall into different levels in the fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. The System's assessment of the significance of particular inputs to these fair value measurements required judgment and considers factors specific to each asset or liability. The table below shows the fair value leveling of the investments for the System.

Short-term securities generally include investments in money market-type securities reported at cost plus accrued interest, which approximates market or fair value.

Equity (including real estate investment trust securities) and derivative securities classified in Level 1 are valued using prices quoted in active markets for those securities.

Debt and debt derivative securities classified in Level 2 and Level 3 are valued using either a bid evaluation or a matrix pricing technique. Bid evaluations may include market quotations, yields, maturities, call features and ratings. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Index linked debt securities are valued by multiplying the external market price feed by the applicable day's Index Ratio. Level 2 debt securities have non-proprietary information that was readily available to market participants, from multiple independent sources, which are known to be actively involved in the market. Level 3 debt securities use proprietary information or single source pricing. Equity and equity derivative securities classified in Level 2 are securities whose values are derived daily from associated traded securities. Equity securities classified in Level 3 are valued with last trade data having limited trading volume.

The valuation method for certain equity, fixed income, and marketable alternatives investments is based on the investments' NAV per share (or its equivalent) provided by the investee. The following table shows the investments of the System measured at the NAV per share.

#### **Commingled Equity Funds**

This type of investment consists of equities diversified across all sectors. The fair values of the investments in these types have been determined using the NAV per share of the investments.

#### Commingled Fixed Income Funds

This type of investment consists of fixed income securities diversified across all sectors. The fair values of the investments in these types have been determined using the NAV per share of the investments.

#### **Absolute Return Funds**

The fair values of the investments in this type have been determined using the NAV per share of the investments.

#### **Private Equity Partnerships**

This type of investment includes limited partnerships. Generally speaking, the types of partnership strategies included in this portfolio are venture capital, buyouts, special situations, mezzanine, and distressed debt. Infrastructure fund investments are included as private equity partnerships. Private equity partnerships have an approximate life of 10 years and are considered illiquid. Redemptions are restricted over the life of the partnership. During the life of the partnerships, distributions are received as underlying partnership investments are realized. The System has no plans to liquidate the total portfolio. As of June 30, 2017, it is probable all of the investments in this type will be sold at an amount different from the NAV per share (or its equivalent) of the System's ownership interest in partner's capital.

#### Real Estate Funds

This type includes investments in core open-end funds and non-core real estate funds. Investments in open-end funds have limited redemption availability as redemption opportunities are based on available liquidity. Non-core funds do not offer redemptions. The nature of these investments is that distributions from each investment will be received as the underlying investments are liquidated. The System has no plans to liquidate the total portfolio. As of June 30, 2017, it is probable all of the investments in this type will be sold at an amount different from the NAV per share (or its equivalent) of the System's ownership interest in partner's capital.

#### Self-Managed Plan Funds

Investments in open-end mutual funds and variable annuities whose fair value is determined by quoted prices in active markets for identical assets are categorized as Level 1. One stable value fund and two commingled equity pools, consisting of equities diversified across all sectors, have fair values determined using the NAV per share of the investments.

## Investments and Short-Term Holdings Measured at Fair Value

(\$ in thousands)

(\$ in thousands)				Fair Value	Ме	asurements	Using	9
As o	of Jun	e 30, 2017		Level 1		Level 2		Level 3
Defined Benefit Plan								
Investments by Fair Value Level								
Debt securities								
U.S. government	\$	1,636,145	\$1	,636,145	\$	_	\$	_
U.S. agency obligations		828,487		-		813,470		15,017
Municipal obligations		26,419		-		25,592		827
U.S. corporate obligations		587,090		-		587,087		3
U.S. asset backed		234,011		-		197,391		36,620
Fixed income funds		255,203		-		255,203		-
Foreign obligations		263,521		-		228,935		34,586
Total debt securities	\$	3,830,876	\$1	1,636,145	\$ 2	2,107,678	\$	87,053
Short-term securities and								
cash adjustments	\$	103,189	\$	75,535	\$	27,921	\$	(267)
Total short-term securities	_							
and cash adjustments	\$	103,189	\$	75,535	\$	27,921	\$	(267)
Equity securities								
U.S. equity securities	\$	4,910,586	\$4	1,909,103	\$	1,183	\$	300
Foreign equity securities	*	2,288,420		2,160,816	*	64,722	*	62,882
Total equity securities	\$	7,199,006		7,069,919	\$	65,905	\$	63,182
Total oquity coculture	<u> </u>	7,200,000	Ψ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				00,102
Investments Measured at the Net Asset Value (N	AV)							
Commingled fixed income funds	\$	912,637	\$	-	\$	-	\$	-
Commingled equity funds		2,366,024		-		-		-
Commingled foreign equity funds		495,950		-		-		-
Private real estate funds		1,043,148		-		-		-
Private equity funds		1,010,437		-		-		-
Hedge funds		899,826		-		-		-
Commodity funds		329,837		-		-		-
Total investments measured at the NAV	/ \$	7,057,859	\$	-	\$	-	\$	-
Total investments by fair value level	_							
and measured at the NAV	\$	18,190,930	\$	-	\$	-	\$	-
Investment Derivative Instruments								
U.S. fixed income derivatives	\$	6,410	\$	10	\$	6,401	\$	(1)
Foreign fixed income derivatives		(424)		(496)		84		(12)
U.S. equity derivatives		(479)		(539)		-		60
Foreign equity derivatives		43		43		-		-
Total investment derivative instruments	\$	5,550	\$	(982)	\$	6,485	\$	47
Invested Securities Lending Collateral								
Fixed income securities	\$	705,137	\$	_	\$	705,137	\$	_
Total invested securities lending collate	· ·	705,137	\$	-	\$	705,137	\$	-
_	<u> </u>							
Self-Managed Plan								
Mutual funds and variable annuities		500.054		500 054				
Fixed income funds	\$	529,654		529,654	\$	-	\$	-
Equity funds		1,231,779	]	L,231,779		-		-
Real estate funds	_	37,510		37,510				
Total Self-Managed Plan	*	1 700 047	*	700 0 47	<b>.</b>		<b>*</b>	
assets by fair value level	\$	1,798,943		L,798,943	\$	-	\$	-
Investments measured at the NAV  Total investments by fair value level	\$	253,831	\$		\$		\$	-
and measured at the NAV	\$	2,052,774	\$	-	\$	-	\$	-
	_		•		-			

#### **Investments Measured at Net Asset Value**

(\$ in thousands)

			Unfunded mitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Defined Benefit Plan					
Commingled fixed income funds <sup>(1)</sup>	\$ 912,637	\$	-	Daily, Monthly	1-10 Days
Commingled international equity and global real estate investment funds <sup>(1)</sup>	2,861,974		-	Daily, Monthly	2-5 Days
Private real estate funds <sup>(2)</sup>	1,043,148		156,416	Quarterly, if Eligible	45-90 Days, if Eligible
Private equity funds <sup>(2)</sup>	1,010,437		800,961	Not Eligible	N/A
Hedge funds <sup>(3)</sup>	899,826		-	Daily, Monthly, Quarterly, Semi-Annually, Annually	3-90 Days
Commodity funds <sup>(4)</sup>	329,837		-	Daily, Monthly	1-30 Days
	\$ 7,057,859	\$	957,377		
Self-Managed Plan					
Stable value fund <sup>(5)</sup> Commingled equity pools <sup>(6)</sup>	\$ 44,309 209,522		-	Daily, Annually Daily, if Eligible	1-365 Days 1 Day, if Eligible
	\$ 253,831	. \$	-		

<sup>(1)</sup> **Commingled funds.** Ten fixed income funds, seven international equity funds and one real estate investment fund are considered to be commingled in nature. Each are valued at the net asset value of units held at the end of the period based upon the fair value of the underlying investments.

#### **Custodial Credit Risk for Deposits**

Custodial credit risk for deposits is the risk that in the event of a financial institution failure, State Universities Retirement System deposits may not be returned. Cash held in the investment related bank account in excess of \$250,000 is uninsured. SURS has a formal policy to address custodial credit risk. Deposits are under the custody of The Northern Trust Company which has an AA- Long Term Deposit/Debt rating by Standard & Poor's, an Aa2 rating by Moody's, and an AA rating by Fitch. At June 30, 2017, the carrying amount of cash was \$477,639,944 and the bank balance was \$323,674,548 of which \$(355,368) was foreign currency deposits and was exposed to custodial credit risk. The remaining \$80,316,163 was made up of short-term invested funds which are considered to be investments for the purpose of assessing custodial credit risk.

<sup>(2)</sup> Private real estate and private equity funds. The real estate investments are 15 core, value-add, and opportunistic real estate funds. The private equity funds are 219 limited partnership interests in equity or debt securities of privately held companies. The fair values of these funds have been determined using net assets valued one quarter in arrears plus current quarter cash flows. Real estate closed-end funds and private equity funds are not eligible for redemption.

<sup>(3)</sup>**Hedge funds.** Two funds invest in a select group of underlying managers that implement a number of different alternative investment strategies and invest in a variety of markets through limited partnerships, limited liability companies and other investment entities.

<sup>(4)</sup> Commodity funds. The two funds are invested with one active long-only manager and one active long/short manager.

<sup>(5)</sup> **Stable value fund.** The fund is invested in fixed income securities and shares of money market funds. It is valued at the net asset value of units held at the end of the period based upon the fair value of the underlying investments.

<sup>(6)</sup> Commingled equity pools. The two pools are commingled in nature. Each is valued at the net asset value of units held at the end of the period based upon the fair value of the underlying investments.

### **Overlay Program**

SURS employs a manager to provide an overlay program to ensure the System's major asset classes remain within a certain percentage of their targeted weights. Market movements can lead to significant implicit tilts within the portfolio. For example, a sharp decline in equities will many times be accompanied by stability within fixed income. Consequently the equity position will decrease as a percentage of assets while fixed income will increase. This causes an "implicit" tilt towards fixed income. The overlay program brings these implicit tilts back within an acceptable band and is a cost effective way to rebalance assets.

### **Investment Policies**

Investments are governed by Chapter 40, Act 5, Articles 1 and 15, of the *Illinois Compiled Statutes*. The most important aspect of the statutes is the prudent expert rule, which establishes a standard of care for all fiduciaries. (A fiduciary is any person who has authority or control with respect to the management or administration of plan assets.) The prudent expert rule states that fiduciaries must discharge their duties with the care, skill, prudence, and diligence that a prudent person acting in a like capacity and familiar with such matters would use under conditions prevailing at the time. The SURS Board of Trustees has adopted an Investment Policy that contains general policies for investments. Revisions to Investment Policy sections on asset allocation and rebalancing strategy, selection and retention, performance measurement and reporting, securities litigation policy, and emerging investment managers and broker/dealers were approved on December 9, 2016. The Investment Section of this report contains a summary of these policies. Within the prudent expert framework, the SURS Board of Trustees establishes specific investment guidelines in the investment management agreement of each individual investment management firm, and monitors the firms accordingly.

### **Investment Commitments**

Alternative investment portfolios consist of passive interests in limited partnerships. The System had outstanding commitments to private equity limited partnerships of approximately \$670.5 million as of June 30, 2017. The System had outstanding commitments to real estate partnerships of \$117.0 million and to infrastructure partnerships of approximately \$26.5 million at June 30, 2017.

### Investments

The carrying values of investments by type at June 30, 2017 are summarized below:

Equity investments		
U.S. equities	\$	7,276,653,338
Non-U.S. equities		2,722,092,257
U.S. private equity		840,596,968
Non-U.S. private equity		232,117,705
U.S. equity derivatives		(478,963)
Non-U.S. equity derivatives		42,634
Fixed income investments		
U.S. government obligations		1,636,144,899
U.S. agency obligations		828,486,887
U.S. corporate fixed income		1,807,325,389
U.S. fixed income, other		208,033,897
Non-U.S. fixed income securities		263,521,371
U.S. short term investments		101,148,007
Non-U.S. short term investments		1,998,065
U.S. fixed income derivatives		6,410,052
Non-U.S. fixed income derivatives		(424,059)
Real estate investments		
U.S. real estate		963,302,671
Non-U.S. real estate		79,845,982
Hedge fund investments		
Hedge funds		899,825,946
Commodities investments		
Commodities		329,837,403
Mutual fund and variable annuities		
Self-Managed Plan mutual funds and variable annuity funds	_	2,052,773,940
Total Investments	\$	20,249,254,389

<sup>(</sup>a) Fixed income investments presented in this table include \$80,316,163 of short-term investments with maturities of less than 90 days, which are included in the cash and short-term investments total on the financial statements.

(b) U.S. short-term investments principally consist of money market funds and options.

<sup>(</sup>c) Fixed income investments presented in this table include \$14,927,055 of short-term bills and notes with maturities greater than 90 days.

<sup>(</sup>d) Fixed income investments presented in this table include commingled funds, derivatives, cash, and cash equivalent holdings.

### **Custodial Credit Risk**

Custodial credit risk for investments is the risk that, in the event of a failure of the counterparty to a transaction, the System will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. SURS has adopted a formal policy specific to custodial credit risk. To minimize custodial credit risk, SURS performs due diligence on service providers, provides investment parameters for investment vehicles, monitors the financial condition of the custodian, endeavors to have all investments held in custodial accounts through specific sources, and requires the custodian to meet certain requirements. At June 30, 2017, no investments were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent but not in the System's name.

### Concentration of Credit Risk

Concentration of credit risk is the risk of loss that may be attributed to the magnitude of the System's investment in a single issue. SURS has not adopted a formal policy specific to concentration of credit risk. However, this area is addressed with each of the relevant investment managers in the Investment Management Agreement between the parties. The System's investment portfolios are managed by professional investment management firms. These firms must maintain diversified portfolios and must comply with risk management guidelines specific to each of their investment management agreements. Excluding U.S. government and agency issues, the portfolios are limited to a 5% allocation in any single investment grade U.S. issuer. Allocation limits also apply to international issuers. At June 30, 2017, SURS had no investments in any one issuer that represented 5% or more of the System's total investments.

### Credit Risk of Debt Securities

Credit risk is the risk that the issuer or other counterparty to an investment will not fulfill obligations. SURS has not adopted a formal policy specific to credit risk of debt securities. However, this area is addressed with each of the relevant investment managers in the Investment Management Agreement between the parties. The quality ratings of investments in fixed income securities of the System as described by Standard & Poor's rating agency at June 30, 2017 are as follows:

Quality Rating: Standard & Poor's	Domestic**	International	Total
AAA	\$ 118,360,441	\$ 29,525,227	\$ 147,885,668
AA+	777,032,517	1,022,042	778,054,559
AA	32,108,560	3,565,316	35,673,876
AA-	41,431,467	5,399,069	46,830,536
A+	23,911,962	26,151,654	50,063,616
A	62,929,633	10,055,554	72,985,187
A-	84,441,432	40,549,227	124,990,659
BBB+	185,499,113	25,839,973	211,339,086
BBB	87,586,262	27,064,593	114,650,855
BBB-	88,734,107	28,521,260	117,255,367
BB+	17,091,001	16,473,796	33,564,797
BB	7,400,824	13,590,782	20,991,606
BB-	10,242,102	23,407,987	33,650,089
B+	4,135,107	10,019,523	14,154,630
В	5,527,392	4,605,471	10,132,863
B-	6,482,100	3,537,411	10,019,511
CCC+	-	357,304	357,304
CCC	12,586,910	1,742,324	14,329,234
CC	-	138,506	138,506
D	2,045,721	94,142	2,139,863
Not rated ***	200,454,033	4,763,711	205,217,744
Total credit risk: debt securities	\$ 1,768,000,684	\$ 276,424,872	\$ 2,044,425,556
U.S. government & agencies *	 1,808,424,372	 <u>-</u>	 1,808,424,372
Total debt securities investments	\$ 3,576,425,056	\$ 276,424,872	\$ 3,852,849,928

<sup>\*</sup> Obligations of the U.S. government or obligations explicitly guaranteed by the U.S. government agencies Federal Housing Administration (FHA), Government National Mortgage Association (GNMA), and Small Business Administration (SBA) are not considered to have credit risk.

### Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The State Universities Retirement System manages its exposure to fair value loss arising from increasing interest rates by diversifying the debt securities portfolio. The System has not adopted a formal policy specific to interest rate risk. However, this area is addressed with each of the relevant investment managers in the Investment Management Agreement between the parties.

At June 30, 2017, the segmented time distribution of the various investment types of debt securities of the System are as follows:

		Maturities in Years				
Туре	2017 Fair Value	Less than 1 year	1 to 5 years	6 to 10 years	10 to 20 years	More than 20 years
U.S. gov't & agency fixed income*	\$ 2,583,373,730	\$183,179,317	\$ 684,142,283	\$ 694,990,889	\$159,995,541	\$ 861,065,700
U.S. corporate fixed income **	993,051,326	52,969,417	295,355,882	370,555,371	117,396,483	156,774,173
Non-U.S. fixed income	276,424,872	33,388,658	82,908,524	120,786,021	8,896,118	30,445,551
Total***	\$ 3,852,849,928	\$269,537,392	\$1,062,406,689	\$1,186,332,281	\$286,288,142	\$1,048,285,424

<sup>\*</sup> Includes \$24,910,239 from Self-Managed Plan mutual fund.

<sup>\*\*</sup> Domestic includes \$196,861,190 from Self-Managed Plan variable annuities and mutual funds.

<sup>\*\*\*</sup> The credit risk by quality ratings does not include commingled funds, derivatives, cash, and cash equivalent holdings for which there is no quality rating.

<sup>\*\*</sup> Includes \$171,950,951 from Self-Managed Plan variable annuities and mutual funds.

<sup>\*\*\*</sup> The segmented time distribution of debt securities does not include commingled funds, derivatives, cash and cash equivalent holdings for which there is no maturity date.

# Foreign Currency Risk

Foreign currency risk is the risk that changes in currency exchange rates will adversely affect the fair value of an investment or a deposit. SURS has not adopted a formal policy specific to foreign currency risk. However, this area is addressed with each of the relevant investment managers in the Investment Management Agreement between the parties. International investment management firms maintain portfolios with diversified foreign currency risk for SURS. The System's exposure to foreign currency risk derives from its positions in foreign currency and foreign currency-denominated equity and fixed income investments. At June 30, 2017 the System's exposure to foreign currency risk is as follows:

Currency	Equity	Fixed Income*	Total
Australian dollar	\$ 93,441,872	\$ 2,701,612	\$ 96,143,484
Brazilian real	19,720,749	3,509,894	23,230,643
British pound sterling	325,437,146	1,226,044	326,663,190
Canadian dollar	94,273,185	2,092,145	96,365,330
Chinese yuan renminbi	-	125	125
Colombian peso	-	1,425,724	1,425,724
Danish krone	18,878,935	57,805	18,936,740
Euro	587,636,680	2,131,494	589,768,174
Hong Kong dollar	114,653,293	29,350	114,682,643
Hungarian forint	5,786,700	-	5,786,700
Indian rupee	-	138,199	138,199
Indonesian rupiah	17,690,908	-	17,690,908
Japanese yen	429,073,897	8,647,555	437,721,452
Mexican peso	6,257,427	(2,398,391)	3,859,036
New Israeli shekel	4,851,585	6,085	4,857,670
New Taiwan dollar	30,669,602	(3,479,739)	27,189,863
New Zealand dollar	2,994,312	(3,961,925)	(967,613)
Norwegian krone	14,954,302	1,457	14,955,759
Peruvian nuevo sol	-	(24,187)	(24,187)
Philippine peso	290,187	-	290,187
Polish zloty	1,196,735	147,439	1,344,174
Russian ruble (new)	-	2,277,152	2,277,152
Singapore dollar	44,190,481	(3,562,936)	40,627,545
South African rand	7,805,262	74	7,805,336
South Korean won	46,965,977	(9,004,876)	37,961,101
Swedish krona	85,118,426	922	85,119,348
Swiss franc	114,550,259	(1,989,045)	112,561,214
Thai baht	8,743,986	25	8,744,011
Turkish lira	9,194,679	118,995	9,313,674
Total securities subject to foreign currency risk	\$ 2,084,376,585	\$ 90,997	\$ 2,084,467,582
Foreign investments denominated in U.S. dollars	949,721,993	265,004,380	1,214,726,373
Total foreign investment securities	\$ 3,034,098,578	\$ 265,095,377	\$ 3,299,193,955

<sup>\*</sup> Includes Swaps, Options and Short Term Investments. These derivatives and pending transactons have resulted in negative totals for certain currencies.

### **Derivative Securities**

The System invests in derivative securities through its investment managers. A derivative security is an investment whose value is derived from other financial instruments such as commodity prices, bond and stock prices, or a market index. The System's derivatives are considered investments. The fair value of all derivative financial instruments is reported in the Statement of Plan Net Position, and the change in the fair value is recorded in the Statement of Changes in Plan Net Position as net appreciation (depreciation) in fair value of investments.

In the case of an obligation to purchase (long a financial future or a call option), the full value of the obligation is held in cash or cash equivalents. For obligations to sell (short a financial future or a put option), the reference security is held in the portfolio. Derivative transactions involve, to varying degrees, credit risk and market risk. Credit risk is the possibility that a loss may occur because a party to a transaction fails to perform according to terms. Market risk is the possibility that a change in interest rate risk or foreign currency risk will cause the value of a financial instrument to decrease or become more costly to settle. The market risk associated with derivatives, the prices of which are constantly fluctuating, is regulated by imposing strict limits as to the types, amounts and degree of risk that investment managers may undertake. These limits are approved by the Board of Trustees and senior management, and the risk positions of the investment managers are reviewed on a periodic basis to monitor compliance with the limits. The System has not adopted a formal policy specific to master netting arrangements. As of June 30, 2017, SURS' derivative investments included foreign currency forward contracts, rights and warrants, futures, options, swaps and swaptions. At June 30, 2017, SURS' investments in derivatives had the following balances:

Short     (42,915,186)     (72,013)     (72,013)       Fixed Income     486,495,839     (863,004)     (857,229)       Short     (560,376,369)     314,889     329,827       Commodity     -     -     -     -       Long     -     -     -     -       Short     (5,489,950)     (115,050)     (19,476)       Foreign Exchange     54,490     (210)     (18,720)       Short     (5,748,430)     (16,460)     (2,620)       Total Futures     \$54,099,444     \$(740,065)     \$(7,667,093)       Options		Notional Value 2017	Fair Value 2017	Change in Fair Value	
Futures Equity Long \$182,079,050 \$11,783 \$(7,026,862) Short (42,915,186) (72,013) (72,013) Fixed Income Long 486,495,839 (863,004) (857,229) Short (560,376,369) 314,889 329,827 Commodity Long 5,489,950) (115,050) (19,476) Foreign Exchange Long 54,490 (210) (18,720) Short (5,748,430) (16,460) (2,620) Total Futures \$54,099,444 \$(740,065) \$(7,667,093)	Forwards	\$ -	\$ (707,229)	\$ 1,344,548	
Equity     Long     \$ 182,079,050     \$ 11,783     \$ (7,026,862)       Short     (42,915,186)     (72,013)     (72,013)       Fixed Income     486,495,839     (863,004)     (857,229)       Short     (560,376,369)     314,889     329,827       Commodity     -     -     -     -       Long     5,489,950)     (115,050)     (19,476)       Foreign Exchange     54,490     (210)     (18,720)       Short     (5,748,430)     (16,460)     (2,620)       Total Futures     \$ 54,099,444     \$ (740,065)     \$ (7,667,093)	Rights and Warrants	\$ 200,151	\$ 61,340	\$ 25,561	
Long         \$ 182,079,050         \$ 11,783         \$ (7,026,862)           Short         (42,915,186)         (72,013)         (72,013)           Fixed Income         486,495,839         (863,004)         (857,229)           Short         (560,376,369)         314,889         329,827           Commodity         -         -         -         -           Long         -         -         -         -         -           Short         (5,489,950)         (115,050)         (19,476)           Foreign Exchange         54,490         (210)         (18,720)           Short         (5,748,430)         (16,460)         (2,620)           Total Futures         \$ 54,099,444         \$ (740,065)         \$ (7,667,093)					
Long     486,495,839     (863,004)     (857,229)       Short     (560,376,369)     314,889     329,827       Commodity           Short     (5,489,950)     (115,050)     (19,476)       Foreign Exchange     54,490     (210)     (18,720)       Short     (5,748,430)     (16,460)     (2,620)       Total Futures     \$ 54,099,444     \$ (740,065)     \$ (7,667,093)       Options	Long Short			\$ (7,026,862) (72,013)	
Short         (5,489,950)         (115,050)         (19,476)           Foreign Exchange         54,490         (210)         (18,720)           Short         (5,748,430)         (16,460)         (2,620)           Total Futures         \$54,099,444         \$(740,065)         \$(7,667,093)           Options	Long Short Commodity			(857,229) 329,827	
Long         54,490         (210)         (18,720)           Short         (5,748,430)         (16,460)         (2,620)           Total Futures         \$ 54,099,444         \$ (740,065)         \$ (7,667,093)           Options	Short	(5,489,950)	(115,050)	(19,476)	
	Long Short	(5,748,430)	(16,460)	(2,620)	
Equity Call \$ (15,000) \$ (187,120) \$ (187,120) Put (45,000) (310,550) (310,550)	Call Put				
Fixed Income       (1,017,200,000)       93,525       165,558         Put       547,900,000       37,388       44,059         Cash and Cash Equivalent	Call Put		· ·		
Call - 196,248	Call Put	(100,000)	(372)	196,248 (291,912)	
Call     49,800,000     (23,512)     399,691       Put     (145,734,927)     (169,379)     (418,631)       Total Options     \$ (565,394,927)     \$ (560,020)     \$ (402,657)	Call Put	(145,734,927)	(169,379)	(418,631)	
Swaps		Ψ (303,334,327)	<del>Ψ (300,020)</del>	<del>Ψ (402,037)</del>	
Credit Default         Buying Protection       \$ 35,266,597       \$ (1,496,408)       \$ (1,213,232)         Selling Protection       38,932,484       (298,350)       955,375         Inflation-linked	Credit Default Buying Protection Selling Protection				
Pay Fixed 5,828,388 (92,982) (1,551,128) Receive Fixed 350,717 20,403 1,988,981 Interest Rate Pay Fixed	Pay Fixed Receive Fixed Interest Rate				
Receive Fixed 300,412,125 7,830,919 40,954,999		300,412,125	7,830,919	40,954,999	
Volatility 3,600,000 84,762 83,002	Volatility	3,600,000	84,762	83,002	
Total Swaps \$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Total Swaps	\$ 384,390,311	\$ 6,048,344	\$41,217,997	

Foreign currency forward contracts are used to protect against the currency risk in SURS' foreign equity and fixed income security portfolios. A foreign currency forward contract is an agreement to buy or sell a specific amount of a foreign currency at a specified delivery or maturity date for an agreed-upon price. Fluctuations in the market value of foreign currency forward contracts are marked to market on a daily basis. The gain or loss arising from the difference between the original contracts and the closing of such contracts is included in the investment income in the Statement of Changes in Plan Net Position. At June 30, 2017, SURS' investments in foreign currency forward contracts are as follows:

Currency	Pending oreign Exchange Purchases	Pending Foreign Exchange Sales	Fair Value 2017	Change in Fair Value
Australian dollar	\$ -	\$ -	\$ -	\$ 75,246
Brazilian real	9,346	(52,319)	(42,973)	2,088,875
British pound sterling	164,431	(270,581)	(106,150)	(107,017)
Canadian dollar	-	(17,168)	(17,168)	(972)
Chinese yuan renminbi	-	-	-	(138,559)
Colombia peso	-	-	-	6,225
Danish krone	-	-	-	466,666
Euro	74,702	(273,321)	(198,619)	(150,752)
Hong Kong dollar	-	-	-	16
Indian rupee	1,844	-	1,844	1,844
Japanese yen	-	(197)	(197)	1,293,920
Malaysian ringgit	-	-	-	59,173
Mexican peso	334,388	(349,729)	(15,341)	8,042
New Taiwan dollar	-	-	-	6,062
New Zealand dollar	-	(6,512)	(6,512)	59,365
Peruvian sol	20,014	(17,160)	2,854	2,854
Polish zloty	-	-	-	2,438
Russian ruble (new)	-	-	-	66,646
Singapore dollar	-	(13,437)	(13,437)	29,236
South Korean won	-	-	-	73,370
Swiss franc	-	(257)	(257)	(257)
Turkish lira	79		79	2,065
Total securities subject to foreign currency risk	\$ 604,804	\$ (1,000,681)	\$ (395,877)	\$ 3,844,486
Foreign investments denominated in U.S. dollar	rs 251,377	(562,728)	(311,352)	(2,499,937)
Total foreign investment securities	\$ 856,181	\$ (1,563,409)	\$ (707,229)	\$ 1,344,549

Rights and warrants provide SURS investment managers the right, but not the obligation, to purchase or sell a company's stock at a fixed price until a specified expiration date. Rights normally are issued with common stock and expire after two to four weeks. Warrants typically are issued together with a bond or preferred stock and may not expire for several years. The fair value of rights and warrants is reported in the investments in the Statement of Plan Net Position. The gain or loss from rights and warrants is included in the investment income in the Statement of Changes in Plan Net Position.

SURS investment managers use financial futures to replicate an underlying security they wish to hold (sell) in the portfolio. In certain instances, it may be beneficial to own a futures contract rather than the underlying security (arbitrage). Additionally, SURS investment managers use futures contracts to improve the yield or adjust the duration of the fixed income portfolio. A financial futures contract is an agreement to buy or sell a specific amount at a specified delivery or maturity date for an agreed-upon price. Futures contracts are traded on organized exchanges, thereby minimizing the System's credit risk. The net change in the futures contracts value is settled daily in cash with the exchanges. The cash or securities to fulfill these obligations are held in the investment portfolio. As the market value of the futures contract varies from the original contract price, a gain or loss is paid to or received from the clearinghouse and recognized in the Statement of Changes in Plan Net Position.

SURS investment managers use options in an attempt to add value to the portfolio (collect premiums) or protect (hedge) a position in the portfolio. Financial options are an agreement that gives one party the right, but not the obligation, to buy or sell a specific amount of an asset for a specified price, called the strike price, on or before a specified expiration date. As a writer of financial options, the System receives a premium at the outset of the agreement and bears the risk of an unfavorable change in the price of the financial instrument underlying the option. All written financial options are recognized as a liability on the System's financial statements. As a purchaser of financial options, the System pays a premium at the outset of the agreement and the counterparty bears the risk of an unfavorable change in the price of the financial instrument underlying the option.

SURS fixed income managers invest in swaps and swaptions to manage exposure to credit, inflation, interest rate, and volatility risks. Swaptions are options on swaps that give the purchaser the right, but not the obligation, to enter into a swap at a specific date in the future. Swap agreements are privately negotiated agreements with a counterparty to exchange or swap investment cash flows, assets, foreign currencies or market-linked returns at specified, future intervals. In connection with swap agreements, securities or cash may be identified as collateral in accordance with the terms of the respective swap agreements to provide assets of value and recourse in the event of default, bankruptcy or insolvency. Swaps are marked to market daily based upon values from third party vendors or quotations from market makers to the extent available and any change in value is recorded as an unrealized gain or loss. SURS investment managers have entered into credit default, inflation-linked, interest rate, and volatility swap agreements.

# **Swaps and Credit Risk**

			Maturi	ties in Years
	Notional Value 2017	Fair Value 2017	Less than 1 year	1 to 5 years
Swaps				
Credit Default	\$ 25,907,060	\$ (1,329,621)	\$ -	\$ (1,329,621)
Credit Default	14,363,163	(214,457)	-	114,513
Credit Default	5,664,716	(419,352)	(3,966)	(3,670)
Credit Default	28,264,142	168,672		188,097
Total, Credit Default	74,199,081	(1,794,758)	(3,966)	(1,030,681)
			(521,600)	А
Inflation-Linked	623,496	15,867	-	-
Inflation-Linked	5,555,609	(88,446)	-	-
Inflation-Linked	-	-	-	-
Inflation-Linked		-	-	-
Total, Inflation-Linked	6,179,105	(72,579)	-	-
Interest Rate	-	-	-	-
Interest Rate	-	-	-	-
Interest Rate	-	-	-	-
Interest Rate	300,412,125	7,830,919	(7,943)	(232,086)
Total, Interest Rate	300,412,125	7,830,919	(7,943)	(232,086)
			659,273	А
Volatility	3,600,000	84,762	84,762	-
Total Swaps	\$ 384,390,311	\$ 6,048,344	\$ 72,852	\$ (1,262,767)
Swaptions	\$ (104,334,927)	\$ (159,011)	\$ 135,135	\$ (294,146)
	8,400,000	(33,880)	(4,719)	(29,161)
	\$ (95,934,927)	\$ (192,891)	\$ 130,416	\$ (323,307)
Forwards	\$ -	\$ (707,229)	\$ (665,511)	\$ (41,718)

### Maturities in Years

Counterparty Credit Rating	Change in Fair Value		More than 20 years		10 to 20 years	6 to 10 years		
AA	(1,330,267)	\$	_	\$	_	_	\$	
A	1,019,417	Ψ	(328,970)	Ψ	_	_	Ψ	
BBB	(84,155)		(411,716)		_	_		
No Rating	137,149		-		_	(19,425)		
No Ruting	(257,856)		(740,686)		-	(19,425)		
AA	15,867		20,403		(4,536)	-		
А	(94,571)		-		(88,446)	-		
BBB	516,558		-		-	-		
No Rating	-		-		-	-		
	437,854		20,403		(92,982)	-		
AA	(15,669)		-		-	-		
А	170,265		-		-	-		
BBB	165,200		-		-	-		
No Rating	40,635,202		1,053,952		(227,764)	7,244,760		
	40,954,998		1,053,952		(227,764)	7,244,760		
А	83,002							
	41,217,998	\$	333,669	\$	(320,746)	\$ 7,225,336	\$	
А	447,940	\$						
BBB	(343,033)	Ψ						
No Rating	(123,846)							
	(18,939)	\$	-	\$	-	\$ -	\$	
No Rating	1,344,549	\$	_	\$		\$ _	\$	

Credit default swap agreements involve one party making a stream of payments (the buyer of protection) to another party (the seller of protection) in exchange for the right to receive a specified return in the event of a default or other credit event for the referenced entity, obligation or index. The seller of protection generally receives from the buyer of protection a fixed rate of income throughout the term of the swap provided there is no credit event. The seller effectively adds leverage to its portfolio as it is subject to investment exposure on the notional amount of the swap.

Inflation-linked swap agreements involve a stream of fixed payments in exchange for variable payments linked to an inflation index. These swaps can protect against unfavorable changes in inflation expectations and are utilized to transfer inflation risk from one counterparty to another.

Interest rate swap agreements involve the exchange of a set of variable and fixed-rate interest payments linked to a referenced interest rate without an exchange of the underlying principal amount. These agreements are used to limit or manage exposure to fluctuations in interest rates or to obtain a marginally lower interest rate than would be available without the swap. Gains and losses on swaps are determined based on market values and are recorded in the Statement of Changes in Plan Net Position.

Volatility swap agreements involve two parties taking opposite sides of the future volatility of an underlying instrument (e.g., an index, individual security or exchange rate) without the influence of its price. Payoff is determined by the future realized volatility. At expiry the holder of the long position in a volatility swap receives (or owes) the difference between the realized volatility and the volatility strike that was agreed upon at contract initiation. Volatility swaps are often utilized to trade the spread between realized and implied volatility or to hedge the volatility exposure of other positions in a portfolio.

SURS Rate	Counterparty Rate	Notional Value 2017	Fair Value 2017	Pay Fixed / Receive Fixed
3.14% to 3.40%	UK RPI All Items NSA <sup>1</sup>	\$ 5,828,388 \$ 5,828,388	\$ (92,982) \$ (92,982)	Pay Fixed
UK RPI All Items NSA <sup>1</sup> 6MEUR-EURIBOR-Act/360-Bloomberg <sup>2</sup> Brazil Cetip Interbank Deposit <sup>3</sup> CAD-BA-CDOR 3M <sup>4</sup> GBP-LIBOR-BBA-Bloomberg 6M <sup>5</sup> JPY-LIBOR-BBA-Bloomberg 6M <sup>6</sup> USD-LIBOR-BBA-Bloomberg 3M <sup>7</sup>	3.59% 0.25% to 2.05% 11.68% 1.75% to 2.30% 1.50% to 2.05% 0.30% 1.25% to 2.50%	\$ 350,716 35,357,049 (688,810) (847,001) (24,550,154) (10,323,959) 301,465,000 \$ 300,762,841	\$ 20,403 (12,211) (21,438) 526,445 (443,736) (79,873) 7,861,732 \$ 7,851,322	Receive Fixed Receive Fixed Receive Fixed Receive Fixed Receive Fixed Receive Fixed Receive Fixed
Volatility Measure	Strike	Notional Value 2017	Fair Value 2017	Pay Fixed/ Recieve Fixed
USD-LIBOR-BBA-Bloomberg 1M <sup>7</sup>	Not applicable	\$ 3,600,000 \$ 3,600,000	\$ 84,762 \$ 84,762	Variable

<sup>&</sup>lt;sup>1</sup> Retail Price Index All Items United Kingdom Consumer Price Index excluding Tobacco

Derivatives which are exchange traded are not subject to credit risk. No derivatives held are subject to custodial credit risk. The maximum loss that would be recognized at June 30, 2017, if all counterparties fail to perform as contracted is \$13.8 million. This maximum exposure is reduced by approximately \$2.7 million in collateral held and approximately \$9.0 million in liabilities, resulting in \$2.1 million net exposure to credit risk.

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<sup>&</sup>lt;sup>2</sup> Euro Interbank Offered Rate (EURIBOR)

<sup>&</sup>lt;sup>3</sup> Brazil Cetip Interbank Deposit (CDI)

<sup>&</sup>lt;sup>4</sup> Canadian Dollar Offered Rate (CDOR)

<sup>&</sup>lt;sup>5</sup> Pound London Interbank Offered Rate (LIBOR)

<sup>&</sup>lt;sup>6</sup> Yen London Interbank Offered Rate (LIBOR)

<sup>&</sup>lt;sup>7</sup> U.S. Dollar London Interbank Offered Rate (LIBOR)

### Securities Lending

The SURS Board of Trustees policies permit the System to lend its securities to broker-dealers and other entities with a simultaneous agreement to return the collateral for the same securities in the future. Deutsche Bank AG New York, the System's third party agent lender in fiscal year 2017, loaned securities in exchange for cash collateral at 102% for U.S. securities and 105% for international securities. Cash collateral is shown on the System's financial statements. Securities lent are included in the Statement of Plan Net Position. Types of securities on loan include agency and government bonds, domestic equities, and international equities. At year end, the System had no credit risk as a result of its securities lending program as the collateral received exceeded the fair value of the securities loaned. The contract with the System's third party agent lender requires it to indemnify the System if the borrowers fail to return the securities (and if the collateral is inadequate to replace the securities lent) or fail to pay the System for income distributions by the securities' issuers while the securities are out on loan. All securities loans can be terminated on demand by either the System or the borrower, although the average term of the loans was 1.00 day. Cash collateral is invested in the indemnified repurchase agreements, which at year end had a weighted average final maturity of 50.59 days, a weighted average reset of 8.03 days, and a fair value of \$705.1 million.

Collateral as of June 30, 2017 (\$ millions)

Securities on loan as of June 30, 2017	\$ 688.0
Fair value of cash collateral invested	\$ 705.1
Fair value of collateral received	\$ 704.4
Change in fair value*	\$ 0.7

<sup>\*</sup>Included in net appreciation in fair value of investments in Statement of Changes in Plan Net Position.

### Self-Managed Plan

The SMP members have the ability to invest their account balances in 27 mutual funds, variable annuities and commingled pools. These investment options are offered by two providers: Fidelity Investments and Teachers Insurance and Annuity Association (TIAA). As of June 30, 2017, the SMP had investments of \$2,164,798,567. A detailed schedule (unaudited) of the funds and balances at June 30, 2017 is located in the Investment Section of The Comprehensive Annual Financial Report.

### **Reverse Repurchase Agreements**

SURS held approximately \$28.5 million in reverse repurchase agreements at June 30, 2017. Investment guidelines permit certain portfolios to enter into reverse repurchase agreements, which are a sale of securities with a simultaneous agreement to repurchase the securities in the future at the same price plus a stated rate of interest. The market value of the securities underlying reverse repurchase agreements exceeds the cash received, providing the counterparty a margin against a decline in market value of the securities. If the counterparty defaults on their obligations to sell these securities back to SURS or provide cash of equal value, SURS could suffer an economic loss equal to the difference between the market value of the underlying securities plus accrued interest and the agreement obligation including accrued interest. This credit exposure at June 30, 2017 was \$(6.5) million.

SURS may enter into reverse repurchase agreements with various counterparties and such transactions are governed by Master Repurchase Agreements (MRA). MRAs are negotiated contracts and contain terms in which SURS seeks to minimize counterparty credit risk. SURS also controls credit exposures by limiting trades with any one counterparty to stipulated amounts. The counterparty credit exposure is monitored daily and managed through the transfer of margin, in the form of cash or securities, between SURS and the counterparty.

The cash proceeds from reverse repurchase agreements are reinvested. The maturities of the purchases made with the proceeds of reverse repurchase agreements are not necessarily matched to the maturities of the agreements. The agreed-upon yields earned by the counterparty were between 1.0% and 1.3%. The reverse repurchase agreements had open maturities, whereby a maturity date is not established upon entering into the agreement; however, interest rates on the agreements are negotiated daily. The agreements can be terminated at the will of either SURS or the counterparty.

### V. Net Pension Liability

The net pension liability for the SURS defined benefit plan as of June 30, 2017 is as follows:

### Employer Net Pension Liability (\$ millions)

Fiscal Year	Total Pension Liability	Plan Net Position	Net Pension Liability	as a % of Total Pension Liability
2017	\$43,965.9	\$18,484.8	\$25,481.1	_42.04%

The net pension liability represents the defined benefit plan's total pension liability determined in accordance with GASB Statement No. 67, less the plan net position. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The last experience study was performed in February 2015. An economic assumption study was performed June 2017. The total pension liability as of June 30, 2017 is based on the results of an actuarial valuation date of June 30, 2016 and rolled forward using generally accepted actuarial procedures. A summary of the actuarial methods and assumptions used in the latest actuarial valuation are presented below.

### **Summary of Actuarial Assumptions**

Valuation date June 30, 2016 Actuarial cost method Individual entry age

Actuarial Assumptions
Single discount rate 7.09%
Expected rate of return 7.25%

Municipal bond rate 3.56% (based on fixed-income municipal bonds reported in Fidelity

"20-Year Municipal GO AA Index" as of June 30, 2017)

DI--- NI-+ D--:+:---

Inflation 2.75%

Projected salary increases 3.75% to 15.0% including inflation

Post-retirement cost of living adjustments 3.0%

Mortality table RP2014 White Collar, gender distinct. Projected using MP-2014

two dimensional mortality improvement scale, set forward

one year for male and female annuitants.

### Single Discount Rate

A single discount rate of 7.09% was used to measure the total pension liability as of June 30, 2017. This single discount rate was based on an expected return on pension plan investments of 7.25% and a municipal bond rate of 3.56%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between the statutory contribution rates and the member rate. Estimated contributions of which the majority of the contributions (approximately 83% in 2018) is provided by the State of Illinois, are projected to be \$1.6 billion in 2018 and growing to \$3.8 billion in 2045 based on current statutory requirements for current members. Based on these assumptions, the pension plan's net position and future contributions were sufficient to finance the benefit payments through the year 2073. As a result, the long-term expected rate of return on pension plan investments was applied to projected benefit payments through the year 2073, and the municipal bond rate was applied to all benefit payments after that date.

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Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the net pension liability calculated using a single discount rate of 7.09%, as well as impact on the net pension liability of increasing the single discount rate by 1% and decreasing the single discount rate by 1%.

### Sensitivity of Net Pension Liability to the Single Discount Rate Assumption as of June 30, 2017 (\$ millions)

	1%	Current	1%
	Decrease 6.09%	Discount Rate 7.09%	Increase 8.09%
Net Pension Liability	\$ 30,885.1	\$ 25,481.1	\$ 20,997.5

### Long-Term Expected Rate of Return

The asset allocation of investments within the Defined Benefit portfolio is approved by the Board of Trustees in accordance with SURS Investment Policy. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully-funded status for the benefits provided through the defined benefit pension plan. The table displayed below is the Board-approved asset allocation policy for fiscal year 2017 and the long-term expected real rates of return. The long-term expected rate of return on defined benefit investment assets was determined using a building-block method in accordance with the Actuarial Standards of Practices (ASOP) 27 Section 3.6.2(a) in which best estimate ranges of expected future real rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adjusted for inflation.

Asset Class	Strategic Policy Allocation	Weighted Average Long-Term Expected Real Rate of Return (Arithmetic)
U.S. equity	23.0%	6.08%
Private equity	6.0	8.73
Non-U.S. equity	19.0	7.34
Global equity	8.0	6.85
Fixed income	19.0	1.38
Treasury Inflation-Protected Securities (TIPS)	4.0	1.17
Emerging market debt (EMD)	3.0	4.14
Real estate		
REITs	4.0	5.75
Direct real estate	6.0	4.62
Commodities	2.0	4.23
Hedged strategies	5.0	3.95
Opportunity Fund	1.0	6.71
Total	100.0%	5.20%
Inflation		2.75
Expected arithmetic return*		7.95%

<sup>\*</sup>The geometric expected rate of return includes volatility and correlation estimates while the expected arithmetic return does not.

For the year ended June 30, 2017 the annual money-weighted rate of return on defined benefit plan investments, net of fees was 12.15%. The money weighted rate of return expresses investment performance, net of fees, adjusted for the changing amounts actually invested.

### VI. Capital Assets

Capital assets activity for the year ended June 30, 2017 was as follows:

Beg	inr	ing Balance		dditions/ ansfers In	Т	Disposals ransfers Ou		Enc	ding Balance
Land and improvements	\$	531,834	\$	1,775		\$	-	\$	533,609
Office building		7,650,934		316,056			-		7,966,990
Information system									
equipment and software		16,271,322		264,921		461,660	0		16,074,583
Furniture and fixtures		895,076		21,556		8,51	6		908,116
Total capital assets		25,349,166		604,308		470,17	6		25,483,298
Less accumulated depreciation:									
Land and improvements		-		2,933			-		2,933
Office building		3,339,853		233,050			-		3,572,903
Information system									
equipment and software		14,989,412		286,734		461,660	О		14,814,486
Furniture and fixtures		770,748		18,211		8,51	6		780,443
Total accumulated		19,100,013		540,928		470,170	6		19,170,765
depreciation									
Capital assets, net	\$	6,249,153	\$	63,380		<b>5</b>	-	\$	6,312,533

The average estimated useful lives for depreciable capital assets are as follows:

Office building	40 years	Information systems equipment	5 years
Information systems software	10 years	Furniture and fixtures	7 years

### VII. Compensated Absences

The System is obligated to pay employees at termination for unused vacation and sick time. The maximum time for which any individual may be paid is 448 hours of vacation and one-half of unused sick time earned between January 1, 1984 and December 31, 1997. No sick time earned after December 31, 1997 will be compensable at termination.

At June 30, 2017, the System had a liability of \$1,167,571 for compensated absences, based upon the vesting method used for calculation of sick leave payable. The liability is included in the administrative expenses payable on the Statement of Plan Net Position, and the annual increase or decrease in liability is reflected in the financial statements as an increase or decrease in salary expense.

Compensated absences payable for the year ended June 30, 2017 was as follows:

	Beginning Balance	Additions	Reductions	Ending Balance	Estimate Amount Due Within One Year
Compensated absences payable	\$1,226,823	\$ 790,115	\$ 849,367	\$1,167,571	\$ 107,000

### VIII. Insurance Coverage

The System is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The employee health claims are administered through the State of Illinois. The System has minimized the risk of loss through private insurance carriers for commercial, business owners, and automobile policies. The deductible for this insurance coverage ranges from \$100 to \$50,000 per occurrence. There has been no significant reduction of insurance coverage from the prior year. The System has not had any insurance claims filed or paid in the past five fiscal years.

## IX. Post-Employment Benefits

The State provides health, dental, vision, and life insurance benefits for retirees and their dependents in a program administered by the Department of Central Management Services (CMS). Substantially all State employees become eligible for post-employment benefits if they eventually become annuitants of one of the State sponsored pension plans. Health, dental, and vision benefits include basic benefits for annuitants and dependents under the State's self-insurance plan and insurance contracts currently in force. Annuitants may be required to contribute toward health, dental, and vision benefits with the amount based on factors such as date of retirement, years of credited service with the State, whether the annuitant is covered by Medicare, and whether the annuitant has chosen a managed health care plan. Annuitants who retired prior to January 1, 1998, and who are vested in the State Universities Retirement System do not contribute toward health, dental, and vision benefits. For annuitants who retired on or after January 1, 1998, the annuitant's contribution amount is reduced five percent for each year of credited service with the State; therefore, those annuitants with 20 or more years of credited service do not have to contribute toward health, dental, and vision benefits. Annuitants also receive life insurance coverage equal to the annual salary of the last day of employment until age 60, at which time the benefit becomes \$5,000.

The State pays the State Universities Retirement System's portion of employer costs for the benefits provided. The total cost of the State's portion of health, dental, vision, and life insurance benefits of all members, including post-employment health, dental, vision, and life insurance benefits, is recognized as an expenditure by the State in the Illinois Comprehensive Annual Financial Report. The State finances the costs on a pay-as-you-go basis. The total costs incurred for health, dental, vision, and life insurance benefits are not separated by department or component unit for annuitants and their dependents nor active employees and their dependents.

A summary of post-employment benefit provisions, changes in benefit provisions, employee eligibility requirements including eligibility for vesting, and the authority under which benefit provisions are established are included as an integral part of the financial statements of the Department of Central Management Services. A copy of the financial statements of the Department of Central Management Services may be obtained by writing CMS, Stratton Building, Room 715, 401 E. Spring St, Springfield, IL 62706.

### X. Lease Agreements

The System leases office space in Naperville for its Northern Counseling Center. The commitment for this lease is \$12,690 for fiscal year 2017 and will remain the same for 2018. In addition, the System began leasing office space in Springfield for its legislative staff. The fiscal commitment for this lease is \$7,200 for both fiscal years 2017 and 2018.

# REQUIRED SUPPLEMENTARY INFORMATION

# Schedule of Changes in Employer Net Pension Liability and Related Ratios

Total pension liability	2017	2016
Service cost	\$ 658,715,745	\$ 666,374,861
Interest on net pension liability	2,951,246,535	2,876,930,310
Changes in benefit terms	-	-
Differences between expected and actual experience	210,625,398	(3,426,377)
Changes in assumptions	(396,096,848)	532,522,898
Benefit payments	(2,339,897,357)	(2,235,812,995)
Refunds of member accounts	(89,569,617)	(85,015,923)
Net change in pension liability	995,023,856	1,751,572,774
Total pension liability - beginning	42,970,901,717	41,219,328,943
Total pension liability - ending	\$43,965,925,573	<u>\$42,970,901,717</u>
Plan fiduciary net position		
Member contributions	\$ 278,642,830	\$ 278,883,776
Employer contributions	38,386,209	39,348,478
Non-employer contributing entity contributions	1,612,164,501	1,542,946,474
Net investment income	1,994,310,048	17,043,679
Benefit payments	(2,339,897,357)	(2,235,812,995)
Refunds of member accounts	(89,569,617)	(85,015,923)
Non investment administrative expenses	(14,847,009)	(14,731,372)
Net change in plan fiduciary net position	1,479,189,605	(457,337,883)
Plan fiduciary net position - beginning	17,005,629,973	17,462,967,856
Plan fiduciary net position - ending	<u>\$18,484,819,578</u>	\$17,005,629,973
Net pension liability - ending	\$25,481,105,995	\$25,965,271,744

# Schedule of Net Pension Liability (\$ millions)

Fiscal Year	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a % of Total Pension Liability	Covered Payroll	Net Pension Liability as a % of Covered Payroll
2014	\$39,182.3	\$17,391.3	\$21,791.0	44.39%	\$3,522.2	618.67%
2015	41,219.3	17,463.0	23,756.3	42.37	3,606.5	658.71
2016	42,970.9	17,005.6	25,965.3	39.57	3,513.1	739.10
2017	43,965.9	18,484.8	25,481.1	42.04	3,458.3	736.81

Note: The System implemented GASB Statement No. 67 in fiscal year 2014. The information above is presented for as many years as available. The schedule is intended to show information for 10 years.

## Schedule of Investment Returns (A)

2014 18.15% 2015 2.84% 2016 0.12% 2017 12.15%

(A) Annual money-weighted rate of return, net of investment fees

Note: the System implemented GASB Statement No. 67 in fiscal year 2014. The information above is presented for as many years as available. The schedule is intended to show information for ten years.

# REQUIRED SUPPLEMENTARY INFORMATION

# Schedule of Contributions from Employers and Other Contributing Entities (\$ thousands)

		Actual C	ontribution			
Fiscal Year	Actuarially Determined Contribution	Employers	Other Contributing Entities	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2008	\$ 707,537	\$ 38,031	\$ 306,914	\$ 362,592	\$3,303,220	10.44%
2009	874,032	34,360	417,257	422,415	3,463,922	13.04%
2010	1,003,331	34,166	662,429	306,736	3,491,071	19.95%
2011	1,259,048	36,547	737,048	485,453	3,460,838	22.35%
2012	1,443,348	45,596	940,219	457,533	3,477,166	28.35%
2013	1,549,287	41,874	1,359,607	147,806	3,533,858	39.66%
2014	1,560,524	43,899	1,458,965	57,660	3,522,246	42.67%
2015	1,622,656	39,934	1,488,591	94,130	3,606,536	42.38%
2016	1,811,060	39,348	1,542,946	228,765	3,513,108	45.04%
2017	1,864,843	38,386	1,612,165	214,292	3,458,320	47.73%

<sup>\*</sup>The fiscal year 2016 amounts shown above have been corrected from the prior year reporting.

# NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

### Schedule of Changes in Net Pension Liability

The covered employee payroll is equal to the defined benefit payroll from June 30, 2016 valuation rolled forward with one year of wage inflation at 3.75%. The beginning of the year total pension liability uses a single discount rate of 7.01% and the end of the year total pension liability uses a single discount rate of 7.09%. The difference between the actual and expected experience includes the impact of this change in the single discount rate based on the long-term municipal bond rate of 2.85% as of June 25, 2016 and 3.56% as of June 30, 2017.

# Actuarial Assumptions and Methods Used in Determining Fiscal Year 2017 Contributions

Valuation Date	June 30, 2015
Valuation Method	Projected unit credit
Amortization Method	The statutory contribution is equal to the level percentage of pay contributions determined so that the Plan attains a 90% funded ratio by the end of 2045.
Remaining Amortization Period	Not applicable. While an amortization payment is not directly calculated, it represents the difference between the total statutory contribution and the employer normal cost contribution.
Asset Valuation Method	5 year smoothed market
Inflation	2.75%
Salary Increases	3.75% to 15.0% including inflation
Investment Rate of Return	7.25% beginning with the actuarial valuation as of June 30, 2014.
Real Rate of Return	4.5%
Retirement Age	Experience-based table of rates. Last updated for the 2015 valuation pursuant to an experience study of the period 2010 - 2014.
Mortality	RP2014 mortality White Collar table with gender distinct, projected using MP-2014 two dimensional mortality improvement scale, set forward one year for male and female annuitants.
Other Notes	None

# Summary Schedule of Administrative Expenses For the Years Ended June 30, 2017 and 2016

	2017	2016
Defined benefit plan		
Personnel Services		
Salary and wages	\$ 7,661,635	\$ 7,844,176
Retirement contributions	935,091	964,392
Insurance and payroll taxes	2,520,718	2,595,773
	11,117,444	11,404,341
Professional Services		
Computer services	791,130	644,045
Medical consultation	7,360	3,046
Technical and actuarial	760,164	624,517
Legal services	180,531	156,854
	1,739,185	1,428,462
Communications		
Postage	143,664	283,046
Printing and copying	45,725	62,132
Telephone	102,875	106,204
	292,264	451,382
Other Services		
Equipment repairs, rental and maintenance	93,888	74,047
Building operations, maintenance, office rental	300,703	260,197
Surety bonds and insurance	400,711	251,435
Memberships and subscriptions	80,986	51,347
Transportation, travel and conferences	151,645	171,805
Education	20,233	24,670
EDP supplies and equipment	66,781	71,457
Office supplies	42,242	47,462
	1,157,189	952,420
Depreciation and amortization	540,927	494,767
Total administrative expenses - defined benefit plan	<u>\$ 14,847,009</u>	\$ 14,731,372
self-Managed Plan		
Salary and wages	262,586	288,652
Retirement contributions	91,637	96,258
nsurance and payroll taxes	36,418	39,853
Technical and actuarial	56,999	43,500
Postage	6,035	6,322
1emberships and subscriptions	600	600
ransportation, travel and conferences	1,101	2,837
Printing and copying	1,223	1,149
Total administrative expenses - Self-Managed Plan	<u>\$ 456,599</u>	<u>\$ 479,171</u>
Total administrative expenses	\$ 15,303,608	\$ 15,210,543

# Summary Schedule of Consultant Payments For the Years Ended June 30, 2017 and 2016

	2017	2016
Defined benefit plan		
Technical and actuarial services		
Aurico	\$ 3,943	\$ 2,389
The Berwyn Group	5,040	4,200
DreamsTime	470	, =
Express Services, Inc.	9,750	-
Gabriel, Roeder, Smith & Company	215,796	182,512
GHR Engineers and Associates	411	-
Glass Lewis & Co, LLC	85,050	_
Heidrick & Struggles, Inc.	104,789	90,000
Henneman Engineering Inc.		2,190
Illinois Secretary of State	614	_,
Illinois State Board of Investment	6,166	_
Janet Jones & Associates	48,000	44,000
Kinsel & Sons Consulting	2,750	
LexisNexis	638	500
LinkedIn Corporation	7,875	500
·	,	-
Marco Consulting Group Mintz Group LLC	12,062	-
•	4,500	1 044
Miscellaneous	-	1,844
MSCI ESG Research Inc.	19,494	
Open position advertising / Recruitment	11,683	5,520
PayScale, Inc.	6,199	5,000
Piracle, Inc.	-	258
Propio Language Services, LLC	801	758
Reed Group	1,360	1,360
Segal Consulting	-	74,730
Sikich LLP	60,703	50,488
SurveyMonkey Inc.	300	300
The Northern Trust Company	75,250	80,888
Woolard Marketing Consultants, Inc.	22,520	19,580
Zahn Governmental Solutions, LLC	54,000	58,000
	<u>760,164</u>	624,517
Legal services	0.005	0.470
Area Wide Reporting Service	2,985	2,438
Burke Burns & Pinelli, Ltd.	132,169	121,477
Circuit Court of Cook County	365	-
Esquire Deposition Solutions LLC	340	170
Featherstun, Gaumer, et al.	33,237	16,356
Illinois Office of the Attorney General	134	35
IRSS/FRT, LLC	-	25,000
Jackson Walker L.L.P.	1,137	3,089
Katten Muchin Rosenman LLP	-	3,150
Laner Muchin, Ltd.	-	5,483
Mayer Brown LLP	10,053	9,656
Sivertsen Reporting Service	84	-
Superior Court of Maricopa County	27	-
	180,531	186,854
Self-Managed Plan		
Technical and actuarial services		
NEPC	56,999	43,500
Total consultant payments	\$ 997,694	\$ 854,871
The second secon	,	·,

<sup>\*</sup>The fiscal year 2016 legal amounts shown above have been corrected from the prior year reporting.

# Defined Benefit Plan Summary Schedule of Investment Fees and Administrative Expenses For the Years Ended June 30, 2017 and 2016

	2017	2016
vestment manager		
Adams Street Partners	\$ 5,881,481	\$ 5,654,084
Alinda Capital Partners	482,325	460,621
Ativo Capital Management	712,305	575,993
BlackRock Institutional Trust Company	2,260,560	5,159,960
BlueBay Asset Management	1,228,387	1,096,404
Blue Vista Capital Management	675,911	652,260
Brookfield Asset Management	525,000	239,674
Calamos Advisors	-	451,863
CastleArk Management	1,017,530	739,389
CBRE Clarion Real Estate Securities	615,159	1,327,86
Channing Capital Management	400,407	687,26
Chicago Equity Partners	339,873	555,78
Colchester Global Investors Limited	378,264	519,059
Courtland Partners	288,750	299,06
Crow Holdings	525,000	687,63
Dune Capital Management	1,299,644	1,182,52
EARNEST Partners	885,160	650,26
Fairview Capital Partners	213.858	99,01
Fidelity Institutional Asset Management	1,441,264	2,010,62
Franklin Templeton Real Estate Advisors	519,983	521,43
Garcia Hamilton & Associates	310,598	193,23
Gladius Capital Management	1,430,706	193,23
		2.077.04
GlobeFlex Capital, L.P.	1,220,211	2,037,84
Heitman	1,091,042	1,323,38
Herndon Capital Management	-	163,33
Holland Capital Management	261,194	284,44
Invesco	1,578,219	100,86
Jacobs Levy Equity Management	<del>-</del>	838,57
J.P. Morgan Asset Management	1,688,371	756,68
KKR Prisma	1,886,655	591,40
LM Capital Group	279,548	271,18
Lombardia Capital Partners	167,273	217,59
Longfellow Investment Management	76,970	80,91
Macquarie Capital	1,117,326	940,14
Mesirow Financial Investment Management	894,134	648,92
Mondrian Investment Partners	1,088,812	833,35
Muller and Monroe Asset Management	731,460	181,09
Neuberger Berman	642,097	487,34
New Century Advisors	183,087	220,27
Northern Trust Asset Management	156,228	162,24
Pacific Alternative Asset Management Company	2,202,319	489,34
Pacific Investment Management Company	4,853,072	2,979,84
Pantheon Ventures	3,326,200	3,599,43
Parametric Clifton	298,270	466,52
Piedmont Investment Advisors	823,152	670,72
Progress Investment Management Company	1,912,380	3,196,25
Prudential Fixed Income	862,774	617,76
Pugh Capital Management	246,164	241,73
RhumbLine Advisers		
RREEF	119,232	129,16
	8,732	50,15
Smith Graham & Company	172,500	168,57
State Street Global Advisors	68,729	61,53
Strategic Global Advisors	993,393	777,37
T. Rowe Price	2,970,695	2,603,45
Taplin, Canida & Habacht	-	119,28
TCW Metropolitan West Asset Management	848,516	863,16
UBS Realty Investors	3,322,039	3,986,33
Wellington Management Company	2,498,446	2,854,68
Total investment management fees	60,021,405	57,778,95

# Defined Benefit Plan Summary Schedule of Investment Fees and Administrative Expenses (continued) For the Years Ended June 30, 2017 and 2016

	2017	2016
Master trustee & custodian		
The Northern Trust Company	1,485,472	1,552,485
Investment consultant, measurement & counsel		
FRT	25,000	-
Jackson Walker L.L.P.	47,282	115,512
Katten Muchin Rosenman LLP	1,695	-
Mayer, Brown, Rowe & Maw LLP	35,833	44,839
NEPC, LLC	412,988	566,500
Proskauer	-	61,074
Total investment management fees	522,798	787,925
Investment administrative expenses		
Personnel	1,133,223	1,250,373
Resources and travel	54,489	163,186
Performance measurement and database	74,222	81,273
Total administrative expenses	1,261,934	1,494,832
Total investment expenses	\$ 63,291,609	\$ 61,614,201



# INVESTMENT

- ☐ LETTER OF CERTIFICATION
- □ REPORT OF INVESTMENT ACTIVITY
- ☐ INVESTMENT SUMMARY
- ☐ INVESTMENT RESULTS
- □ INVESTMENT ALLOCATION
- SUPPORTING SCHEDULES

The Comprehensive Annual Financial Report for Fiscal Year Ended June 30, 2017

# LETTER OF CERTIFICATION

The Northern Trust Company 50 South La Salle Street Chicago, Illinois 60603 312-630-6000



To the Board of Trustees and the Executive Director:

The Northern Trust Company as Master Trustee has provided annual Statements of Account for the State Universities Retirement System Master Trust ("Trust") which, to the best of its knowledge, provide a complete and accurate reflection of The Northern Trust Company's record of the investments, receipts, disbursements, purchases and sales of securities and other transactions pertinent to the Trust for the period July 1, 2016 through June 30, 2017.

In addition to the custody of assets, pursuant to and in accordance with the terms of the agreement establishing the Trust, The Northern Trust Company provided and continues to provide the following services as Master Trustee:

- 1. Receive and hold all amounts paid to the Trust Fund by the Board of Trustees.
- 2. Accept and deliver securities in connection with investment transactions in accordance with the instructions of appointed Investment Managers.
- 3. Collect dividends and registered interest payments.
- 4. Collect matured or called securities and coupons to the extent provided in the operating guidelines of The Northern Trust Company in effect from time to time.
- 5. Transfer securities to a lending agent appointed by the Board of Trustees pursuant to directions from such lending agent.
- Begin, maintain or defend any litigation necessary in connection with the investment, 6. reinvestment of the Trust Fund and the administration of the Trust.
- Invest cash balances held from time to time in the individual investment management accounts in short term-cash equivalent securities.
- 8. Exercise rights of ownership with respect to securities held in the trust fund, including but not limited to, proxy voting in accordance with the instructions of appointed Investment Managers; respond to stock subscriptions, conversion rights, and other capital changes pursuant to procedures set forth in the operating guidelines of The Northern Trust Company in effect from time to time.
- 9. Hold securities in the name of the Trust or nominee form or other means as provided in the agreement establishing the Trust.
- 10. Use the Federal Book Entry Account System for deposit of Treasury securities, and clearing corporations as defined in Article 8 of the Illinois Uniform Commercial Code for the deposit of other securities.
- Employ agents with the consent of the Board of Trustees to the extent provided in the 11. agreement establishing the Trust.
- 12. Provide disbursement services.
- Provide security fail float income to the extent provided in the operating guidelines of 13. The Northern Trust Company in effect from time to time.

THE NORTHERN TRUST COMPANY

NTAC:3NS-20

The Northern Trust Company. Member FDIC. Equal Housing Lender

# REPORT OF INVESTMENT ACTIVITY



1901 Fox Drive, Champaign, IL 61820-7333 800-275-7877 • 217-378-8800 • (Fax) 217-378-9800 www.surs.org

December 12, 2017

Board of Trustees State Universities Retirement System 1901 Fox Drive Champaign, IL 61820

### Dear Board of Trustees:

I am pleased to present the *Investment Section* of the SURS *Comprehensive Annual Financial Report* for the fiscal year ended June 30, 2017, including this report on investment activity. SURS maintains both a defined benefit and a defined contribution plan, known as the Self-Managed Plan (SMP). As of June 30, 2017, the defined benefit plan is valued at approximately \$18.5 billion while the SMP is valued at approximately \$2.2 billion.

Investment performance is calculated using a time-weighted rate of return. Returns are calculated by Northern Trust using industry best practices. Northern Trust calculated performance rates of return by portfolio and all composites used throughout this section. The SURS portfolio returned 12.2% during fiscal year 2017, net of fees, exceeding the policy portfolio return of 11.7%. The relative performance for the period can be attributed to active investment manager performance across much of the portfolio.

When compared to a universe of other large public funds, the SURS net of fee return ranks in the third quartile for the one-year, and slightly above the median for the three-years ending June 30, 2017. The portfolio ranks in, or near, the top quartile of the peer universe over longer time periods.

SURS achieved its strategic asset allocation targets during fiscal year 2017. The targets were established as a result of the June 2014 asset/liability study. The updated asset allocation resulted in a significant reduction in public equity exposure and introduced emerging market debt, hedge fund-of-funds, and commodities into the portfolio. Other key accomplishments during fiscal year 2017 include:

- Significant restructuring of the investment policy to better define the active/passive decision making and the investment manager evaluation processes;
- Shift from active to passive management in the TIPS and REITs asset classes;
- Approval of a 5-year private equity funding plan, totaling \$1.7 billion, to continue SURS' longstanding presence in the asset class;
- Commitment of \$50 million to an existing infrastructure manager to continue investment in the asset class;
- Implementation of a portfolio index option overlay strategy, designed to generate incremental income to a passive equity portfolio; and
- Approval of Dimensional Target Date Retirement Income Funds and the Vanguard Federal Money Market Fund for the Self-Managed Plan line-up.

As previously mentioned, the total fund's excess return relative to the policy portfolio for fiscal year 2017 was due primarily to strong performance of SURS' active managers relative to the benchmark. Eight of nine liquid asset classes outperformed the benchmark over the fiscal year, with global REITs as the lone underperforming liquid asset class, lagging the benchmark by 20 basis points. Global REITs were transitioned from active to passive management in December 2016. Of the private, illiquid asset classes, the real estate portfolio slightly exceeded the benchmark for the year while the opportunity fund portfolio (consisting of infrastructure investments) and the private equity portfolio trailed their benchmarks for the one-year period.

# REPORT OF INVESTMENT ACTIVITY

The infrastructure portfolio has provided good relative results relative to the benchmark over longer time periods (five years), however. Although private equity provided double digit absolute returns during the year, it lagged the public equity market benchmark, detracting from relative returns during the period. Overall, 89% of the policy allocation outperformed the benchmark for the one year.

The Manager Diversity Program, which focuses on qualified investment management firms owned by minorities, females, and persons with a disability (MFDB), continues to be a high priority. As of June 30, 2017, the MDP is valued at approximately \$3.0 billion. In total, assets under management with MFDB firms are approximately \$5.1 billion or 28.0% of the total fund.

The continuing challenge to SURS remains the funding status of the plan. Despite strong long-term returns, SURS remains substantially underfunded. SURS is approximately 44.1% funded as of June 30, 2017, when comparing the market value of assets to plan liabilities. It is important to note, however, that since FY 2011, SURS has received the full annual statutory contribution from the State of Illinois.

Within the Self-Managed Plan target-date fund products containing an income replacement component were reviewed during FY 2017. The Dimensional Target Date Retirement Income Fund series was approved by the Board in June 2017.

Detailed information on the investment program can be found in the Fiscal Year 2018 Investment Plan, available on SURS website.

SURS staff and investment consultant, with oversight from the Board of Trustees, continue to work on behalf of our constituents to secure and deliver the retirement benefits promised.

Sincerely,

Douglas C. Wesley, CFA Chief Investment Officer

Dougle C. Wesley

# **INVESTMENT SUMMARY**

The SURS Board of Trustees is charged with the responsibility of investing the assets entrusted to them solely for the benefit of the System's participants and beneficiaries. The Trustees, in carrying out their responsibilities, adhere to applicable Illinois statutes and the prudent expert rule, which states that the Trustees must act with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of like character with like aims. In carrying out their fiduciary duties, the Trustees have set forth clearly defined investment policy, objectives, and strategies.

### **Investment Policy**

The Board approves the *Statement of Investment Policy,* which outlines the investment philosophy and practices of SURS. The policy describes the organization and division of responsibilities necessary to implement the Board's philosophy and objectives prudently; establishes a framework for making investment decisions, and monitoring investment activity; and promotes effective communication between the Board, Staff, and other involved parties.

### **Investment Objectives**

The investment objective of the total portfolio is to produce annualized investment returns, net of all management fees, which exceed the return of a composite market benchmark or policy portfolio. The policy portfolio is comprised of market indices, which are consistent with the overall asset allocation. The policy portfolio reflects a passive implementation of the investment policy. The strategic policy portfolio is comprised of the benchmarks shown below. Comparisons of total fund performance are also made with a universe of public pension funds implementing generally comparable investment policies. The public pension fund index used for comparative purposes is the InvestorForce Public DB Funds > \$1 Billion Index.

### **Investment Strategies**

### ■ Asset Allocation

Asset allocation studies are completed to provide an efficient allocation of assets to achieve overall risk and return objectives. An asset/liability study completed in June 2014 resulted in slight modifications to SURS' asset allocation targets and incorporated three additional asset classes: emerging market debt, hedged equities, and commodities. The modified long-term strategic asset allocation targets are:

Asset Class	Benchmark Strategic Policy	Portfolio
U.S. Equity	Dow Jones U.S. Total Stock Market Index	23.0%
Non-U.S. Equity	Morgan Stanley All Country World Ex-U.S. Index	19.0
Global Equity	Morgan Stanley All Country World Index	8.0
Private Equity	Dow Jones U.S. Total Stock Market Index + 3.0%	6.0
Fixed Income	Bloomberg Barclays U.S. Aggregate Bond Index	19.0
TIPS	Bloomberg Barclays U.S. TIPS Index	4.0
Emerging Market Debt	Blend of JP Morgan GBI-EM Global Diversified, JP Morgan EMBI Global Diversified	3.0
	and JP Morgan Corporate Emerging Markets Bond Index - Broad	
Direct Real Estate	NCREIF Open End Diversified Core Equity Index	6.0
REITs	FTSE EPRA/NAREIT Developed Index	4.0
Commodities	Bloomberg Commodity Index	2.0
Hedged Strategies	LIBOR +5.0%	5.0
Opportunity Fund	Custom benchmark of the combined investments	1.0
		100.0%

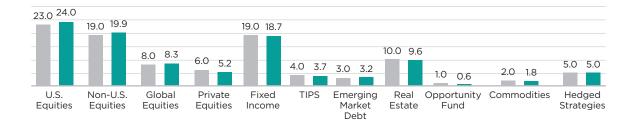
### ■ Diversification

SURS invests in multiple asset classes utilizing various investment managers and strategies as a method to ensure overall fund diversification. As of June 30, 2017, the System had retained the services of 50 investment management firms, several of which manage multiple mandates, and an additional 12 managers through the Progress Emerging Manager of Managers program, of which four also have a direct relationship with SURS. Each investment management firm is afforded full discretion to diversify its portfolio(s) in a manner deemed appropriate. The Trustees have developed guidelines to direct the investment managers in their execution of the overall investment policy. The guidelines are specific to the asset class and strategy managed.

### ■ Rebalancing

Proper implementation of the investment policy requires that a periodic adjustment, or rebalancing, of assets be conducted as needed to ensure conformance with policy target levels. Such rebalancing is necessary to reflect cash flows and performance imbalances among investment managers who are hired to manage assets with a specified strategy. Although a strategy may be within a specified asset class, the manager may be authorized to utilize other instruments in another asset class. SURS' rebalancing policy calls for rebalancing, as soon as practical, if an asset class exceeds or falls below its target allocation by 3%. Ongoing rebalancing of the investment portfolio occurred as needed during the year with the assistance of a cash overlay strategy and System cash flows. At year end, the fund was invested 68% in equities, 26% in fixed income, and 6% in direct real estate funds, as compared with the target allocations of 68%, 26%, and 6%, respectively. The policy target allocations that were approved by the Board on June 13, 2014, were fully implemented in fiscal year 2017 through the strategic transition of assets among investment managers and planned searches.





### **Long-Term Investment Results**

The 10-year period ended June 30, 2017, provided returns that have matched the overall benchmark. SURS total portfolio earned an annualized total return, net of all investment management expenses, of 5.4%. As shown in the investment results table, over the long term, SURS total fund returns are consistent with its market goal (policy portfolio) and more favorable than the median public pension funds benchmark.

This consistent performance is best illustrated by the growth of \$1,000 invested in SURS total fund, the policy portfolio and median public funds index during the past 10 years. The ending points indicate that \$1,000 invested in SURS total fund would have grown to \$1,687, while the same \$1,000 invested in the policy portfolio and median public funds index would have grown to \$1,699 and \$1,642, respectively.

### Fiscal Year 2017 Results

For the fiscal year ended June 30, 2017, SURS total fund returned 12.2%, surpassing the market goal, or policy portfolio, by 0.5%. SURS' one-year return lagged that of the median public pension fund return, as measured by the InvestorForce Public DB > \$1 Billion Index, by 0.1%. For the period, nine of the 12 asset class portfolios, including U.S. equity, non-U.S. equity, global equity, fixed income, TIPS, emerging market debt, direct real estate, hedged strategies and commodities met or exceeded the returns of their respective benchmarks. Strong absolute returns were experienced in U.S. equity, non-U.S. equity, global equity, private equity, fixed income, emerging market debt, direct real estate, hedged strategies and the Opportunity Fund.

**Total Fund** Growth of \$1,000 \$1,800 \$1,699 \$1,687 1,600 \$1.642 1,400 1,200 1.000 800 600 SURS Total Fund Policy Portfolio 400 Public Funds Index 200 0 11 1.3 15 07 09

	Fiscal Year Ended June 30				Annualized			
	2013	2014	2015	2016	2017	3 YR	5 YR	10 YR
Total Fund SURS Policy Portfolio Public Funds Index CPI-U	12.5%	18.2%	2.9%	0.2%	12.2%	5.0%	9.0%	5.4%
	12.4	18.0	2.9	0.8	11.7	5.1	9.0	5.4
	11.9	17.6	2.6	0.8	12.3	5.1	8.8	5.1
	1.8	2.1	0.1	1.0	1.6	0.9	1.3	1.6
<b>U.S. Equity</b> SURS Dow Jones U.S. Total Stock Market	21.9	24.8	7.6	0.8	18.9	8.8	14.4	7.2
	21.5	25.0	7.2	2.0	18.5	9.0	14.5	7.3
Non-U.S. Equity SURS MSCI All Country World Index Ex-U.S.	15.0	22.4	(3.7)	(9.6)	20.9	1.7	8.2	1.3
	13.6	21.8	(5.3)	(10.2)	20.5	0.8	7.2	1.1
Global Equity (2) SURS Performance Benchmark	15.1 16.6	24.3 22.9	2.7 0.7	(2.4) (3.7)	21.6 18.8	6.8 4.8	11.8 10.5	4.5 3.8
Private Equity (1) SURS Dow Jones U.S. Total Stock Market + 3%	7.1	18.7	6.2	4.4	12.9	7.4	9.8	8.0
	17.5	25.6	15.2	2.6	21.1	12.7	16.1	10.6
Fixed Income SURS Performance Benchmark	0.8 (0.7)	4.4 4.4	1.7 1.9	4.3 6.0	1.2 (0.3)	2.4 2.5	2.4 2.2	5.1 4.5
TIPS SURS Performance Benchmark	(4.4)	4.9	(2.4)	3.8	(0.1)	0.4	0.3	4.8
	(4.8)	4.4	(1.7)	4.4	(0.6)	0.6	0.3	4.3
Emerging Market Debt SURS Performance Benchmark	-	-	- -	3.9 4.9	7.4 6.5	- -	-	- -
<b>Direct Real Estate (1)</b> SURS Performance Benchmark	9.8	14.6	12.2	12.2	7.4	10.6	11.0	7.0
	9.7	13.5	11.1	12.6	7.4	10.8	10.9	4.7
Real Estate (REITs) SURS Performance Benchmark	10.1	14.1	1.7	15.4	-	5.5	8.1	4.3
	10.0	13.4	1.7	15.5	0.2	5.6	8.0	3.7
<b>Hedge Funds</b> SURS Performance Benchmark	-	- -	<u>-</u> -	- -	6.1 5.9	- -	-	-
<b>Commodities</b> SURS Performance Benchmark	-	- -	-	-	(2.7) (6.5)	-	-	-
<b>Opportunity Fund</b> SURS Performance Benchmark	27.0	8.1	5.4	8.7	0.2	4.7	9.5	8.7
	6.2	1.5	5.0	6.0	7.6	6.2	6.9	3.4

Return calculations (except for private equities and direct real estate) were prepared using a time-weighted rate of return methodology in accordance with the Performance Presentation Standards of the CFA Institute.

<sup>(1)</sup> Private equity returns and direct real estate returns were prepared using an Internal Rate of Return (IRR) methodology which is consistent with industry standards. Additionally, the returns for both the portfolio and the benchmark are reported one quarter in arrears due to the length of the performance reporting cycle.

<sup>(2)</sup> MSCI World Index through July 2008; asset-weighted benchmark of MSCI World Index and MSCI All Country World Index (ACWI) from August 2008 through November 2008; MSCI ACWI since December 2008.

# **U.S. Equities**

For the fiscal year 2017, SURS U.S. equity portfolio returned 18.9%. SURS portfolio surpassed its market benchmark, the Dow Jones U.S. Total Stock Market (DJ U.S. TSM) Index, by 0.4%. As the table indicates, the Dow Jones U.S. Total Stock Market Index returned 18.5%. Over the past year, growth outperformed value stocks, and small cap outpaced large cap stocks. The portfolio currently maintains a structural tilt to small/mid cap equities. The SURS U.S. equity portfolio is by design, style neutral relative to the Dow Jones U.S. Total Stock Market Index. The returns from this portfolio are expected to track consistently with the broad market.

The accompanying chart indicates the growth of \$1,000 invested in the U.S. equity market during the past 10 years. The ending points indicate that \$1,000 invested in SURS U.S. equity portfolio would have increased to \$2,004 (net of investment management expenses), while the same \$1,000 invested in the Dow Jones U.S. Total Stock Market Index would have increased to \$2,027.

**U.S. Equity Portfolio** 

Growth of \$1,000

F	FY 2017	3 YR	5 YR	10 YR
SURS	18.9%	8.8%	14.4%	7.2%
DJ U.S. Total Stock Market (TSM	18.5	9.0	14.5	7.3
DJ U.S. Large Cap TSM	18.3	9.4	14.6	7.3
DJ U.S. Large Cap Growth TSM	25.1	10.9	15.7	8.7
DJ U.S. Large Cap Value TSM	15.1	8.3	13.6	5.7
DJ U.S. Small Cap TSM	21.2	7.0	14.3	8.1
DJ U.S. Small Cap Growth TSM	26.6	5.9	14.0	8.3
DJ U.S. Small Cap Value TSM	15.9	7.8	14.4	7.8
S & P 500	17.9	9.6	14.6	7.2
Russell 3000	18.5	9.1	14.6	7.3
Russell 2000	24.6	7.4	13.7	6.9



TEN LARGEST U.S. EQUITY HOLDINGS (excludes commingled funds)	Shares	<b>Carrying Value</b>
	000 077	4400 747 074
Apple Inc	890,973	\$128,317,931
Microsoft Corp	1,401,625	96,614,011
Amazon.com Inc	75,084	72,681,312
Facebook Inc Class A	362,691	54,759,087
Johnson & Johnson	401,194	53,073,954
Wells Fargo & Co	928,538	51,450,291
JPMorgan Chase & Co	521,468	47,662,175
Alphabet Inc	49,126	45,671,460
Citigroup Inc	681,426	45,573,771
Unitedhealth Group Inc	232,216	43,057,491

Note: A complete list of the portfolio holdings is available upon request.

## Non-U.S. Equities

For fiscal year 2017, SURS non-U.S. equity portfolio returned 20.9%, exceeding its benchmark return by 0.4%. The non-U.S. equity portfolio performance benchmark, the Morgan Stanley All Country World Ex-US Index, rose 20.5% during the fiscal year. The benchmark represents a mixture of both developed and emerging markets, which varies over time depending on market performance. This mix accurately portrays the manner in which SURS non-U.S. equity investments are allocated.

The accompanying chart indicates the growth of \$1,000 invested in the non-U.S. equity markets during the past 10 years. The ending points indicate that \$1,000 invested in SURS non-U.S. equity portfolio would have grown to \$1,132 (net of investment management expenses), while the same \$1,000 invested in the performance benchmark would have grown to \$1,118.

FY 2017 3 YR 5 YR 10 YR SURS 20.9% 1.7% 8.2% 1.3% MSCI ACWI Ex-US 20.5 0.8 7.2 1.1 8.7 1.0 MSCI EAFE 20.3 1.1 MSCI Emerging Markets 23.7 1.1 4.0 1.9



TEN LARGEST NON-U.S. EQUITY HOLDINGS (excludes commingled funds)	Shares	<b>Carrying Value</b>
Nestle SA (Switzerland)	335.027	\$29.194.385
Allergan PLC (Ireland)	119,393	29,023,244
Sanofi (France)	285,284	27,253,884
GlaxoSmithKline PLC (United Kingdom)	1,156,502	24,569,106
Samsung Electronics Co Ltd (Republic of Korea)	10,736	22,304,306
Roche Holding AG (Switzerland)	79,101	20,170,693
Alibaba Group Holding Ltd (China)	128,817	18,150,315
SAP SE (Germany)	169,521	17,681,599
Allianz SE (Germany)	86,885	17,084,268
Reckitt Benckiser Group PLC (United Kingdom)	168,294	17,016,251

Note: A complete list of the portfolio holdings is available upon request.

### **Global Equities**

SURS global equity portfolio surpassed its benchmark by 2.8% for the fiscal year, returning 21.6%. The benchmark for this portfolio was modified in November of 2008 from the MSCI World Index to the MSCI All Country World Index (ACWI), to include emerging markets as well as developed markets in the benchmark.

The accompanying chart indicates the growth of \$1,000 invested in the global equity markets during the past 10 years. The ending points indicate that \$1,000 invested in SURS global equity portfolio would have grown to \$1,557 (net of investment management expenses), while the same \$1,000 invested in the performance benchmark would have grown to \$1,446.

#### FY 2017 3 YR 5 YR 10 YR **SURS** 21.6% 6.8% 11.8% 4.5% MSCI ACWI 18.8 4.8 10.5 3.7 MSCI World 18.2 5.2 11.4 4.0 Dow Jones U.S. Total 14.5 Stock Market 18.5 9.0 7.3 MSCI EAFE 20.3 1.1 8.7 1.0

20.5

0.8

7.2



### **Private Equities**

MSCI ACWI Ex-US

SURS private equity portfolio posted a positive return of 12.9% during fiscal year 2017. The portfolio's benchmark, the Dow Jones U.S. Total Stock Market Index + 3%, returned 21.1%. As of June 30, 2017, the valuation of SURS private equity portfolio was \$0.95 billion, representing 5.2% of total plan assets. Since inception, the asset class has added significant value to the SURS investment program.

1.1

SURS private equity portfolio is well diversified. Since its inception in 1990, the SURS private equity portfolio has made commitments to numerous partnership funds. The private equity portfolio is diversified by vintage year, general partner groups and sub-asset class types. This diversification effort has benefited the portfolio as different sub-classes perform better under different economic and market conditions.

Since its inception, a total of approximately \$3.2 billion has been committed to the asset class, and of this amount approximately \$2.5 billion has been invested. In addition, during this same period, SURS has received approximately \$3.2 billion in distributions, which, when combined with the current value of the portfolio, indicates that the portfolio has generated a significant return over the approximately 25-year period. The table below indicates that since inception SURS private equity portfolio has significantly exceeded its benchmark return. 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.

FY	2017	3 YR	5 YR	10 YR	Since Inception
SURS	12.9%	7.4%	9.8%	8.0%	20.5%
Performance Benchmark	21.1	12.7	16.1	10.6	13.3
(Dow Jones U.S. Total Stock Market + 300 Basis Points)					

### Fixed Income

The SURS fixed income portfolio returned 1.2% for fiscal year 2017, exceeding the (0.3)% return of the portfolio's benchmark by 1.5%. The fixed income portfolio's benchmark is the Bloomberg Barclays U.S. Aggregate Bond Index, which reflects the manner in which the assets are invested. SURS investment managers typically employ a Core / Core Plus approach that utilizes securities which include government, corporate, mortgage, high yield, and non-U.S. sectors. This asset class has proven to be the most consistent asset of all the portfolios, generating above benchmark returns in 24 of the past 29 fiscal years.

During fiscal year 2013, an unconstrained fixed income investment strategy was introduced into the portfolio. The addition of the unconstrained strategy provided further diversification and downside protection within the overall fixed income portfolio by introducing a strategy that has a low correlation with SURS other fixed income strategies. The unconstrained portfolio employs both a top-down and a bottomup approach to the global fixed income universe with the opportunity to add exposure to securities outside of those included in the Bloomberg Barclays U.S. Aggregate Index.

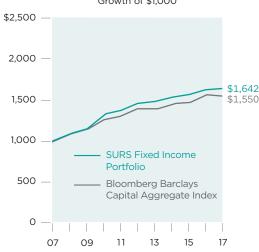
SURS fixed income portfolio is structured to capture the return of the broad market over the long term. Consequently, the returns from this portfolio will tend to track that of the broad fixed income market (Bloomberg Barclays U.S. Aggregate Bond Index) over longer periods of time.

The accompanying chart indicates the growth of \$1,000 invested in the U.S. fixed income market during the past 10 years. The ending points show that \$1,000 invested in SURS U.S. fixed income portfolio would have grown to \$1,642 (net of investment management expenses), while the same \$1,000 invested in the portfolio's benchmark would have grown to \$1,550.

# **Fixed Income Portfolio**

Growth of \$1,000





### TEN LARGEST FIXED INCOME HOLDINGS (excludes commingled funds)

Asset Description	S & P Rating	Interest Rate	Maturity Date	Par Value	Carrying Value
Fannie Mae Mortgage-Backed Bonds	AA+	3.500	August 15, 2047	66,700,000	68,390,378
U.S. Treasury Bonds	AA+	2.875	August 15, 2045	65,795,000	66,162,531
U.S. Treasury Inflation Index Notes	AA+	0.250	January 15, 2025	38,787,000	39,334,046
Fannie Mae Mortgage-Backed Bonds	AA+	4.500	August 15, 2047	36,170,000	38,750,657
U.S. Treasury Notes	AA+	1.750	June 30, 2022	38,515,000	38,265,269
U.S. Treasury Inflation Index Bonds	AA+	0.125	July 15, 2024	37,261,000	37,693,500
U.S. Treasury Notes	AA+	2.000	May 31, 2024	36,200,000	35,908,699
U.S. Treasury Notes	AA+	1.750	May 31, 2022	35,760,000	35,550,482
U.S. Treasury Notes	AA+	0.125	April 15, 2020	33,576,000	35,115,025
U.S. Treasury Inflation Index Bonds	AA+	0.125	July 15, 2022	32,660,000	34,685,675

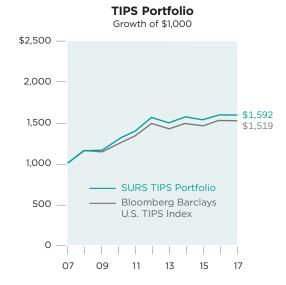
Note: A complete list of the portfolio holdings is available upon request.

## Treasury Inflation-Protected Securities (TIPS)

At June 30, 2017, TIPS accounted for a 4.0% allocation of the total fund. During FY 2017 the TIPS portfolio was transitioned from active to passive management. The TIPS portfolio returned (0.1)% for fiscal year 2017, exceeding its Bloomberg Barclays U.S. TIPS benchmark by 0.5%. The portfolio's ten-year return outpaced the annualized benchmark return by 0.5%.

The accompanying chart indicates the growth of \$1,000 invested in the U.S. TIPS market during the past 10 years. The ending points indicate that \$1,000 invested in SURS U.S. TIPS portfolio would have grown to \$1,592 (net of investment management expenses), while the same \$1,000 invested in the portfolio's benchmark would have grown to \$1,519.

# FY 2017 3 YR 5 YR 10 YR SURS (0.1)% 0.4% 0.3% 4.8% Bloomberg Barclays U.S. TIPS (0.6) 0.6 0.3 4.3



# **Emerging Market Debt**

SURS emerging market debt portfolio employs a combination of strategies including local currency, corporate, and blended strategies. The combination of strategies provides diversification within the asset class and gives SURS exposure to government and corporate emerging market debt denominated in U.S. Dollar or local currency. Emerging market debt became a new asset class in FY 2015 with a target allocation of 3% of the overall SURS portfolio. The emerging market debt portfolio returned 7.4% for fiscal year 2017, exceeding the annualized custom benchmark return by 0.9%.

	FY 2017	Since Inception
SURS	7.4%	4.1%
Custom Benchmark	6.5	5.0
JPM CEMBI Broad	7.0	6.3
JPM EMBI Global Diversified	6.0	6.8
JPM GBI-EM Global Diversified	6.4	3.3

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### Real Estate

The real estate asset class target allocation of 10%, comprised of 4% global REITs and 6% direct real estate, was achieved during FY 2017. As of June 30, 2017, actual allocations were 3.9% and 5.7%, respectively.

Since its inception, a total of approximately \$1.171 billion has been committed to direct real estate funds, and of this amount approximately \$1.054 billion has been invested. The direct real estate portfolio returned 7.4% for the fiscal year, matching its benchmark. The National Council of Real Estate Investment Fiduciaries (NCREIF) Open End Diversified Core Equity (ODCE) Index benchmark returned 7.4% for the same period. 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.

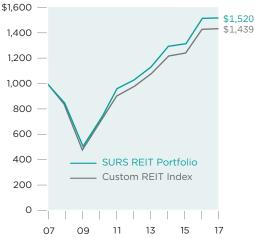
During FY 2017 the REIT portfolio was transitioned from active to passive management. SURS REIT portfolio returned 0.0% during the fiscal year, trailing its benchmark, the FTSE EPRA/NAREIT Developed Index, by 0.2%. The portfolio's five- and ten-year returns exceeded the benchmark returns by 0.1% and 0.6% on an annualized basis.

The accompanying chart indicates the growth of \$1,000 invested in the REIT market during the past 10 years. The ending points indicate that \$1,000 invested in SURS REIT portfolio would have increased to \$1,520 (net of investment management expenses), while the same \$1,000 invested in the performance benchmark would have grown to \$1,439.

	FY 2017	3 YR	5 YR	10 YR
SURS	7.4%	10.6%	11.0%	7.0%
NCREIF ODCE Index	7.4	10.8	10.9	4.7

F	Y 2017	3 YR	5 YR	10 YR
SURS	0.0%	5.5%	8.1%	4.3%
Performance Benchmark	0.2	5.6	8.0	3.7
FTSE EPRA /NAREIT				
Developed	0.2	3.7	7.5	2.0
FTSE EPRA /NAREIT				
Developed Ex-US	5.3	0.8	6.9	0.3

# REITs Portfolio Growth of \$1,000



### Opportunity Fund

The SURS Board of Trustees created the Opportunity Fund during fiscal year 2000 to provide an arena for investments in new opportunities, which might otherwise not be included in the total investment portfolio. Each of the investment portfolios is evaluated on an annual basis to determine whether or not they continue to merit inclusion in the fund. This unique portfolio has been designed in such a manner that no more than approximately 5% of the total fund assets can be invested in the Fund. As of June 30, 2017, there was one type of investment in the portfolio: an infrastructure portfolio. SURS has committed \$130 million to the infrastructure portfolio.

The Opportunity Fund returned 0.2% during the fiscal year, trailing its custom benchmark return by 7.4%. In order to accurately monitor these investments, a custom benchmark has been established. The benchmark reflects a passive implementation of the various portfolios included in the Fund.

	FY 2017	3 YR	5 YR	10 YR
SURS	0.2%	4.7%	9.5%	8.7%
Performance Benchmark	7.6	6.2	6.9	3.4

### Commodities

The commodities asset class has a target allocation of 2% of the overall SURS portfolio. In December 2015, the Board of Trustees selected two active commodities managers to fulfill the 2% targeted mandate. These two managers were funded in June 2016. The first full fiscal year performance for commodities resulted in the portfolio returning (2.7%), outpacing the benchmark return by 3.8%.

	FY 2017
SURS	(2.7)%
Performance Benchmark	(6.5)

# **Hedged Strategies**

As a result of the 2014 asset/liability study, hedged strategies became a new asset class with a target allocation of 5% of the overall SURS portfolio. A search was initiated in December 2014 to identify diversified, multi-strategy Fund of Hedge Fund providers. In October 2015, two firms were selected by the Board to manage a total of 3% of the SURS portfolio and begin the initial implementation of the hedged strategies allocation. During fiscal year 2017, the target allocation for hedged strategies was achieved. The hedged strategies portfolio returned 6.1% for fiscal year 2017, surpassing its benchmark return by 0.2%.

	FY 2017
SURS	6.1%
Performance Benchmark	5.9

### Self-Managed Plan

Fiscal year 2017 marks the nineteenth complete year of the Self-Managed Plan (SMP). As of June 30, 2017, the SMP had accumulated plan assets of approximately \$2.17 billion. This represents an increase of approximately \$345 million since the end of fiscal year 2016. Contributing to the growth in plan assets was a market-related increase, net of asset withdrawals, of \$266 million. During the past several years, SMP participants have continued to maintain a balanced exposure to equities. In aggregate, the total funds invested by SMP participants have an allocation of 70% equity, 28% fixed income, and 2% real estate. This was a 1% increase in the equity allocation as compared to last year's position.

A detailed schedule of the funds available in this plan, along with the investment totals for each fund, can be found in the accompanying table.

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### INVESTMENT ALLOCATION

### **Self-Managed Plan Investment Allocation** June 30, 2017

	U.S. Equity N	Non-U.S. Equity	Fixed Income	Balanced	Real Estate	Tota
Fidelity Funds						
Fidelity Managed Income Portfolio Class 2	\$ -	\$ -	\$ 44,308,869	\$ -	\$ -	\$ 44,308,869
Fidelity U.S. Bond Index Institutional	-	-	36,694,608	-	-	36,694,608
PIMCO Total Return Institutional	-	-	40,723,097	-	-	40,723,097
Fidelity Puritan Class K	-	-	-	200,980,636	-	200,980,636
Ariel Fund Institutional	35,393,835	-	-	-	-	35,393,839
American Beacon Large Cap Value Inst	12,941,797	-	-	-	-	12,941,797
Wells Fargo Small Company Growth R6	16,469,716	-	-	-	-	16,469,710
Fidelity Growth Company Commingled Pool	109,128,831	-	-	-	-	109,128,831
Fidelity Extended Market Index Premium	44,535,916	-	-	-	-	44,535,916
Fidelity Contrafund Commingled Pool	100,393,250	-	-	-	-	100,393,250
Fidelity Low Priced Stock Class K	46,186,199	-	-	-	-	46,186,199
Fidelity 500 Index Institutional	206,738,585	-	-	-	-	206,738,58
Fidelity Diversified International Class K	-	45,675,292	-	-	-	45,675,292
Fidelity Global ex-U.S. Index Institutional	-	27,001,710	-	-	-	27,001,710
Fidelity Real Estate Investment	-	-	-	-	19,101,127	19,101,12
Fidelity Freedom Index 2005 (1)	-	-	-	590,903	-	590,90
Fidelity Freedom Index 2010 (1)	-	-	-	2,180,743	-	2,180,74
Fidelity Freedom Index 2015 (1)	-	-	-	9,344,419	-	9,344,419
Fidelity Freedom Index 2020 (1)	-	-	-	29,992,588	-	29,992,58
Fidelity Freedom Index 2025 (1)	-	-	-	38,554,493	-	38,554,49
Fidelity Freedom Index 2030 (1)	-	-	-	44,481,874	-	44,481,87
Fidelity Freedom Index 2035 (1)	-	-	-	42,484,908	-	42,484,90
Fidelity Freedom Index 2040 (1)	-	-	-	38,887,729	-	38,887,72
Fidelity Freedom Index 2045 (1)	-	-	-	22,096,175	-	22,096,17
Fidelity Freedom Index 2050 (1)	-	-	-	14,860,538	-	14,860,53
Fidelity Freedom Index 2055 (1)	-	-	-	4,963,433	-	4,963,43
Fidelity Freedom Index 2060 (1)	-	-	-	605,992	-	605,99
Fidelity Freedom Index Income	-	-	-	2,370,073	-	2,370,07
Fidelity Total	571,788,129	72,677,002	121,726,574	452,394,504	19,101,127	1,237,687,33
						60.3
TIAA-CREF Funds						
CREF Money Market Account R3	-	-	18,171,180	-	-	18,171,18
TIAA Traditional Annuity	-	-	112,010,528	-	-	112,010,52
CREF Bond Market Account R3	-	-	50,224,378	-	-	50,224,37
CREF Inflation-Linked Bond Account R3	-	-	24,910,239	-	-	24,910,23
CREF Social Choice Account R3	-	-	-	53,704,444	-	53,704,44
CREF Equity Index Account R3	87,091,852	-	-	-	-	87,091,85
CREF Growth Account R3 (2)	515,696	-	-	-	-	515,69
CREF Stock Account R3	167,994,408	-	-	-	-	167,994,40
CREF Global Equities Account R3	-	58,153,897	-	-	-	58,153,89
TIAA Real Estate Account	-	-	-	-	18,409,380	18,409,38
TIAA-CREF Large-Cap Growth Index - Inst	112,700,789	-	-	-	-	112,700,78
TIAA-CREF Lifecycle Index Fund 2010 - Inst	-	-	-	1,526,943	-	1,526,94
TIAA-CREF Lifecycle Index Fund 2015 - Inst	-	-	-	4,184,740	-	4,184,74
TIAA-CREF Lifecycle Index Fund 2020 - Inst	-	-	-	10,999,857	-	10,999,85
TIAA-CREF Lifecycle Index Fund 2025 - Inst	-	-	-	13,515,374	-	13,515,37
TIAA-CREF Lifecycle Index Fund 2030 - Inst	-	-	-	16,923,386	-	16,923,38
TIAA-CREF Lifecycle Index Fund 2035 - Inst	-	-	-	17,210,092	-	17,210,09
TIAA-CREF Lifecycle Index Fund 2040 - Inst	-	-	-	23,668,765	-	23,668,76
TIAA-CREF Lifecycle Index Fund 2045 - Inst	-	-	-	12,749,049	-	12,749,04
TIAA-CREF Lifecycle Index Fund 2050 - Ins	-	-	-	6,504,499	-	6,504,49
TIAA-CREF Lifecycle Index Fund 2055 - Inst	-	-	-	2,426,245	-	2,426,24
TIAA-CREF Lifecycle Index Fund 2060 - Inst	-	-	-	97,478	-	97,47
TIAA-CREF Lifecycle Retirement Inc - Inst	-	-	-	1,393,385	-	1,393,38
TIAA-CREF Total	368,302,745	58,153,897	205,316,325	164,904,257	18,409,380	815,086,60
TIPS ONLY TOTAL	300,302,743	30,133,037	200,010,020	107,309,237	10,403,300	39.7
	\$940,090,874	\$130,830,899	\$327,042,899	\$617,298,761	\$37,510,507	\$2,052,773,940
GRAND TOTALS				30.1%	1.8%	100.0
GRAND TOTALS	45.8%	6.4%	15.9%	30.1%	1.0/0	
	45.8%	6.4%	15.9%	30.1%	1.0%	
SMP Forfeiture Reserve (3) SMP Disability Reserve (3)	45.8%	6.4%	15.9%	30.1%	1.0/0	13,364,050 98,660,57

As of June 30, 2017, the Fidelity Freedom 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.

# **INVESTMENT ALLOCATION**

# Defined Benefit Plan Investment Allocation June 30, 2017 (\$ thousands)

US. Equity Managers         \$ 1,407,655           RhumbLine Advisors         780,743           CastleArk Management         131,581           Channing Capital Management         132,041           EARNEST Parthers         137,386           Gladius Capital Management         169,785           Mesirow Financial Investment Advisors         549,717           Piedmont Investment Advisors         549,717           T. Rowe Price         403,309           Subtotal         21,150,002           BTC Function International Fund         1,314,020           BTC Energying Markets Fund         21,157,002           Advice Capital Management         60,622           Filedily Institutional Asset Management         60,622           Filedily Institutional Asset Management         20,530           Globe-Flex Capital         29,530           Progress Emerging Markets Fund         20,530           Flore Strategic Global Advisors         30,566,422           Strategic Global Advisors         30,566,422           Strategic Global Advisors         505,482           Vellington Managers         505,482           Wellington Managerent         505,482           Vellington Management         50,252           Wellington Management </th <th></th> <th>Fair Value</th>		Fair Value
PumbLine Advisers	U.S. Equity Managers	
CasleArk Management         171,581           Channing Capital Management         137,809           Gladius Capital Management         167,809           Mesirow Financial Investment Management         169,878           Piedmont Investment Advisors         569,717           T. Rowe Price         403,309           Subtotal         1,314,020           Non-U.S. Equity Managers         1,314,020           BTC Custom International Fund         1,314,020           BTC Custom International Fund         219,570           Ativo Capital Management         226,222           ETC International Alpha Tilts         495,946           Fidelity Institutional Asset Management         554,142           Globel Face, Capital         295,307           Progress Emerging Managers         205,395           Strategic Global Advisors         3,656,425           Global Equity Managers         505,482           Wellington Management         51,216           Subtotal         1,809           Fivite Equity Managers         505,482           Wellington Management         512,166           Subtotal         1,809           Private Equity Managers         505,482           Valuation Management         512,166	Northern Trust Asset Management	\$ 1,407,653
Channing Capital Management         123,786           Gladius Capital Management         377,309           Mesirow Financial Investment Management         169,785           Piedmont Investment Advisors         549,717           T. Rowe Price         403,309           Subtotal         34,180,024           Non-U.S. Equity Managers         8           BTC Custom International Fund         1,314,020           BTC Emerging Markets Fund         219,570           Attive Capital Management         266,222           BTC International Alpha Tilts         459,46           Fidelity Institutional Asset Management         295,307           Fidelity Institutional Asset Management         295,307           Progress Emerging Managers         314,823           Subtotal         255,307           Strategic Global Advisors         314,823           Subtotal         50,505           Strategic Global Advisors         50,505           Subtotal         50,505           Strategic Global Advisors         50,505           Subtotal         50,105           Fiveste Equity Managers         70,175           Adams Street Partners         77,499           Adams Street 2016 Global Fund         34,555	RhumbLine Advisers	780,743
EARNEST Partners         137,886           Gladius Capital Management         169,895           Piedmont Investment Advisors         549,717           T. Rowe Price         403,309           Subtotal         31,800,024           Non-U.S. Equity Managers         31,100,024           BTC Custom International Fund         1,219,570           Altvo Capital Management         209,570           Altvo Capital Management         266,222           EIC International Alpha Tilts         498,946           Fidelity Institutional Asset Management         545,124           Globe-Flex Capital         295,307           Progress Emerging Managers         20,535           Strategic Global Advisors         314,823           Strategic Global Advisors         314,823           Strategic Global Advisors         505,422           Mondrian Investment Partners         505,422           Mondrian Investment Partners         505,422           Wellmoton Managers         70,493           Private Equity Managers         77,499           Adams Street 2016 Global Fund         34,555           Adams Street Partners         77,499           Adams Street 2014 Global Fund         80,000           Adams Street 2014 Global Fund	CastleArk Management	171,581
Gladius Capital Management         377,309           Mesirow Financial Investment Manigament         159,785           Piedmont Investment Advisors         549,717           T. Rowe Pice         403,309           Subtotal         31,314,020           Non-U.S. Equity Managers         31,314,020           BTC Custom International Fund         21,537,000           BTC Emerging Markets Fund         29,530           Attive Capital Management         295,307           Elical International Alpha Tilts         495,462           Fidelity Institutional Asset Management         555,122           Glober Fax Capital         295,307           Progress Emerging Managers         31,4823           Subtotal         31,4823           Strategic Global Advisors         31,4823           Subtotal         50,562,225           Clobal Equity Managers         50,402,75           Mondrian Investment Partners         50,402,75           Mondrian Investment Partners         50,40,175           Malma Street Partners         70,407           Adams Street Partners         70,407           Adams Street 2016 Global Fund         34,555           Adams Street 2016 Global Fund         66,502           Adams Street 2016 Global Fund	Channing Capital Management	182,041
Mesirow Financial Investment Advisors         549,717           T. Rowe Price         403,309           Subtotal         4,180,024           Non-U.S. Equity Managers         314,020           BTC Custom International Fund         1,314,020           BTC Custom International Fund         2,19,570           Ativo Capital Management         266,222           BTC International Alpha Tilts         459,946           Fidelity Institutional Asset Management         295,307           Clobe-Flex Capital         295,307           Progress Emerging Managers         205,335           Strategic Global Advisors         314,823           Subtotal         3,656,425           Global Equity Managers         90,175           Mondrian Investment Partners         50,542           T. Rowe Price         940,175           Wellington Management         512,126           Subtotal         1,557,823           Private Equity Managers         7,499           Adams Street 2015 Global Fund         10,894           Adams Street Partners         7,499           Adams Street 2016 Global Fund         68,500           Adams Street 2016 Global Fund         50,542           Adams Street 2016 Global Fund         68,500 </td <td>EARNEST Partners</td> <td>137,886</td>	EARNEST Partners	137,886
Piedmont Investment Advisors	Gladius Capital Management	377,309
Piedmont Investment Advisors	Mesirow Financial Investment Management	169,785
T. Rowe Price		
Subtotal         4,180,024           Non-U.S. Equity Managers         STC Custom International Fund         1,314,020           BTC Emerging Markets Fund         26,222           Ativo Capital Management         266,222           BTC International Alpha Tilts         495,946           Fidelity Institutional Asset Management         545,124           GlobeFlex Capital         295,307           Progress Emerging Managers         205,307           Strategic Global Advisors         314,923           Subtotal         314,923           Subtotal         505,825           Global Equity Managers         505,825           Wellington Management         512,166           T. Rowe Price         504,0175           Wellington Management         512,166           Subtotal         1,557,823           Private Equity Managers         77,499           Adams Street Quity Global Fund         10,894           Adams Street 2015 Global Fund         34,555           Adams Street 2015 Global Fund         58,064           Adams Street 2015 Global Fund         68,360           Adams Street 2015 Global Fund         68,360           Adams Street 2015 Global Opportunities Portfolio         68,360           Adams Street 200	T. Rowe Price	
BTC Custom International Fund         1,314,020           BTC Emerging Markets Fund         219,570           Ativo Capital Management         266,222           BTC International Alpha Tilts         495,946           Fidelity Institutional Asset Management         545,142           GlobeFlex Capital         295,307           Progress Emerging Managers         205,395           Strategic Global Advisors         3,148,23           Subtotal         3,656,425           Global Equity Managers           Mondrian Investment Partners         504,842           T, Rower Price         540,175           Wellington Management         512,166           Subtotal         1,557,823           Private Equity Managers           Adams Street 2015 Global Fund         34,555           Adams Street 2015 Global Fund         34,555           Adams Street 2015 Global Fund         68,360           Adams Street 2017 Global Guptring         78,366           Adams Street 2017 Global Fund         59,356           Adams Street 2016 Global Opportunities Secondary F		
BTC Emerging Markets Fund         206,522           Athvo Capital Management         266,222           BTC International Alpha Tilts         495,966           Fidelity Institutional Asset Management         295,307           GlobeFlex Capital         295,307           Progress Emerging Managers         314,823           Subtotal         3,656,425           Global Equity Managers           Mondrian Investment Partners         505,482           T. Rowe Price         504,175           Wellington Management         512,166           Subtotal         77,499           Adams Street Partners         77,499           Adams Street Partners         77,499           Adams Street 2016 Global Fund         10,894           Adams Street 2015 Global Fund         53,674           Adams Street 2013 Global Fund         59,366           Adams Street 2014 Global Fund         59,366           Adams Street 2015 Global Fund         58,360           Adams Street 2016 Global Offering         77,806           Adams Street 2016 Global Offering         77,806           Adams Street 2009 Global Offering         77,806           Adams Street Global Opportunities Secondary Fund S         11,555           Adams Street Global Seco	Non-U.S. Equity Managers	
Ativo Capital Management         266.222           BTC International Alpha Tilts         495.946           Fidelity Institutional Asset Management         545.142           GlobeFlex Capital         295.307           Progress Emerging Managers         314.823           Strategic Global Advisors         314.823           Subtotal         505.482           Global Equity Managers           Mondrian Investment Partners         505.482           T. Rower Price         504.0175           Wellington Management         512.166           Subtotal         10.894           Adams Street Partners         77.499           Adams Street Partners         77.499           Adams Street Partners         77.499           Adams Street 2016 Global Fund         10.894           Adams Street 2013 Global Fund         68,360           Adams Street 2013 Global Fund         68,360           Adams Street 2013 Global Fund         59,396           Adams Street 2013 Global Fund         68,360           Adams Street 2013 Global Opportunities Portfolio         48,413           Adams Street 2009 Global Opportunities Portfolio         46,413           Adams Street Quol Mon-Lys. Fund         11,555           Adams Street Global Secon	BTC Custom International Fund	1,314,020
BTC International Aipha Tilts         495,946           Fidelity Institutional Asset Management         295,307           Progress Emerging Managers         205,395           Strategic Global Advisors         314,823           Subtotal         3,656,425           Global Equity Managers           Mondrian Investment Partners         505,482           T. Rowe Price         540,175           Wellington Management         512,166           Subtotal         1,557,823           Private Equity Managers           Adams Street Partners         77,499           Adams Street 2016 Global Fund         34,555           Adams Street 2015 Global Fund         53,674           Adams Street 2013 Global Fund         53,674           Adams Street 2013 Global Fund         68,360           Adams Street 2016 Global Fund         53,674           Adams Street 2016 Global Opportunities Portfolio         46,413           Adams Street Global Secondary Fund S         11,555           Adams Street Global Sec	BTC Emerging Markets Fund	219,570
BTC International Aipha Tilts         495,946           Fidelity Institutional Asset Management         295,307           Progress Emerging Managers         205,395           Strategic Global Advisors         314,823           Subtotal         3,656,425           Global Equity Managers           Mondrian Investment Partners         505,482           T. Rowe Price         540,175           Wellington Management         512,166           Subtotal         1,557,823           Private Equity Managers           Adams Street Partners         77,499           Adams Street 2016 Global Fund         10,894           Adams Street 2015 Global Fund         53,674           Adams Street 2013 Global Fund         53,674           Adams Street 2013 Global Fund         68,360           Adams Street 2013 Global Fund         53,674           Adams Street 2008 Global Offering         3,903           Adams Street 2008 Global Offering         7,806           Adams Street 2008 Global Offering         7,806           Adams Street Global Secondary Fund S         11,555           Adams Street Global Secondary Fund S         11,255           Adams Street Global Secondary Fund S         12,422           Pantheon Europe Fun	Ativo Capital Management	266,222
Fidelity Institutional Asset Management         545,142           GlobeFlew Capital         295,307           Progress Emerging Managers         205,395           Strategic Global Advisors         314,823           Subtotal         3,566,425           Global Equity Managers           Mondrian Investment Partners         505,482           T. Rowe Price         540,175           Wellington Management         512,166           Subtotal         77,499           Adams Street Quity Managers         77,499           Adams Street Partners         77,499           Adams Street 2016 Global Fund         10,894           Adams Street 2013 Global Fund         68,360           Adams Street 2013 Global Fund         59,396           Adams Street 2013 Global Fund         68,360           Adams Street 2013 Global Fund         59,396           Adams Street 2013 Global Opportunities Portfolio         46,413           Adams Street 2003 Global Opportunities Portfolio         46,413           Adams Street Global Secondary Fund S         11,555           Ada	•	495.946
GlobeFlex Capital         295,307           Progress Emerging Managers         314,823           Subtotal         3,656,425           Global Equity Managers         505,482           Mondrian Investment Partners         505,482           T. Rowe Price         540,175           Wellington Management         512,156           Subtotal         1,557,823           Private Equity Managers         77,499           Adams Street Partners         77,499           Adams Street 2016 Global Fund         34,555           Adams Street 2013 Global Fund         68,360           Adams Street 2003 Global Offering         7,806           Adams Street 2003 Global Offering         7,806           Adams Street 2004 Global Fund         5,725           Adams Street Global Secondary Fund         1,242           Adams Street 2003 Global Offering         7,806           Adams Street Global Secondary Fund I         1,242           Adams Street Global Secondary Fund I         1,242           Adams Street Global Gender Fund II         1,034           Muller and Monro	·	
Progress Emerging Managers         205,395           Strategic Global Advisors         314,823           Subtotal         3,656,425           Global Equity Managers         505,482           Mondrian Investment Partners         505,482           T. Rowe Price         501,215           Wellington Management         512,166           Subtotal         77,499           Adams Street Partners         77,499           Adams Street Partners         77,499           Adams Street 2016 Global Fund         10,894           Adams Street 2013 Global Fund         68,360           Adams Street 2014 Global Fund         78,266           Adams Street 2013 Global Fund         68,360           Adams Street 2014 Global Fund         78,266           Adams Street 2013 Global Fund         78,266           Adams Street 2013 Global Fund         78,266           Adams Street 2014 Global Opportunities Portfolio         46,413           Adams Street 2007 Global Opportunities Portfolio         46,413           Adams Street 2007 Global Opportunities Portfolio         98,262      <		
Strategic Global Advisors         314,823           Subtotal         3,655,425           Global Equity Managers         505,482           Mondrian Investment Partners         505,482           T. Rowe Price         540,175           Wellington Management         512,166           Subtotal         1,557,825           Private Equity Managers           Adams Street Partners         77,499           Adams Street 2015 Global Fund         34,555           Adams Street 2014 Global Fund         53,674           Adams Street 2013 Global Fund         59,366           Adams Street 2003 Global Offering         38,309           Adams Street 2008 Global Offering         7,780           Adams Street 2008 Global Offering         7,780           Adams Street Clobal Opportunities Portfolio         46,413           Adams Street 2004 Non-U.S. Fund         12,422           Fairview Lincoln Fund I         33,319           Muller and Monroe Eurerging PEFF         496           Muller and Monroe Eurerging PEFF         9,223           Pantheon Europe Fund VI<	· · · · · · · · · · · · · · · · · · ·	
Subtotal         3,656,425           Global Equity Managers           Mondrian Investment Partners         505,482           T. Rowe Price         540,175           Wellington Management         512,166           Subtotal         1,557,823           Private Equity Managers           Adams Street Partners         77,499           Adams Street 2016 Global Fund         10,894           Adams Street 2013 Global Fund         53,674           Adams Street 2013 Global Fund         53,604           Adams Street 2013 Global Fund         59,366           Adams Street 2003 Global Offering         83,903           Adams Street 2003 Global Offering         77,806           Adams Street 2009 Global Offering         77,806           Adams Street Clobal Opportunities Portfolio         46,413           Adams Street Clobal Opportunities Portfolio         46,413           Adams Street Clobal Opportunities Portfolio         9,723           Adams Street Clobal Opportunities Portfolio         9,723           Adams Street 2006 floword         11,555		
Mondrian Investment Partners   505,482   7. Rowe Price   540,176		
Mondrian Investment Partners         505,482           T. Rowe Price         540,175           Wellington Management         512,166           Subtotal         1,557,823           Private Equity Managers           Adams Street Partners         77,499           Adams Street 2016 Global Fund         10,894           Adams Street 2015 Global Fund         53,674           Adams Street 2012 Global Fund         68,500           Adams Street 2012 Global Fund         68,500           Adams Street 2012 Global Fund         68,500           Adams Street 2012 Global Fund         59,396           Adams Street 2012 Global Fund         59,396           Adams Street 2009 Global Offering         77,806           Adams Street 2009 Global Offering         77,806           Adams Street Global Opportunities Portfolio         46,413           Adams Street Global Secondary Fund 5         11,555           Adams Street Global Peccurian Fund 5         11,555           Adams Street 2004 Non-U.S. Fund         12,422           Fairview Lincoln Fund I         33,319           Muller and Monroe ILPEFF         96           Muller and Monroe MPEFF         9,223           Pantheon Europe Fund VII         22,431           Pantheon	Suptotal	3,030,423
T. Rowe Price         540,175           Wellington Management         512,166           Subtotal         1,557,823           Private Equity Managers           Adams Street Partners         77,499           Adams Street 2016 Global Fund         10,894           Adams Street 2013 Global Fund         53,674           Adams Street 2013 Global Fund         68,360           Adams Street 2013 Global Fund         59,396           Adams Street 2010 Global Offering         83,903           Adams Street 2009 Global Offering         77,806           Adams Street 2007 Global Opportunities Portfolio         46,413           Adams Street Global Secondary Fund S         11,555           Adams Street Global Secondary Fund S         11,555           Adams Street 2004 Non-U.S. Fund         12,422           Fairview Lincoln Fund I         33,319           Muller and Monroe Emerging PEFF         496           Muller and Monroe MPEFF         9,223           Pantheon Europe Fund III         10,347           Pantheon Europe Fund VI         24,431           Pantheon Global Secondary Fund II         3,857           Pantheon Usba XIII         3,857           Pantheon Usba XIII         3,857           Pantheon Ventures, Inc		E0E 492
Wellington Management Subtotal         512,166 (3,557,825)           Private Equity Managers           Adams Street Partners         77,499 (3,698)           Adams Street 2016 Global Fund         10,894 (3,698)           Adams Street 2015 Global Fund         53,674 (3,668)           Adams Street 2012 Global Fund         68,360 (3,608)           Adams Street 2012 Global Fund         59,396 (3,608)           Adams Street 2012 Global Fund         59,396 (3,608)           Adams Street 2012 Global Operity         83,903 (3,608)           Adams Street 2008 Global Offering         77,806 (3,608)           Adams Street 2009 Global Opportunities Portfolio         46,413 (3,608)           Adams Street Global Opportunities Secondary Fund         5,725 (3,725)           Adams Street Global Secondary Fund 5         11,555 (3,725)           Adams Street Global Opportunities Secondary Fund 5         11,555 (3,725)           Adams Street Global Secondary Fund 5         12,422 (3,722)           Ajent Color Fund Global Secondary Fund 5         12,422 (3,722)           Ajent Color Fund Global Secondary Fund 6         7,307 (3,702)           Muller and Monroe Emerging PEFF         9,223 (3,722)           Pantheon Europe Fund VII         27,486 (3,722)           Pantheon Europe Fund VII         27,486 (3,722)		
Private Equity Managers           Adams Street Partners         77.499           Adams Street 2016 Global Fund         10.894           Adams Street 2015 Global Fund         53.674           Adams Street 2011 Global Fund         68.360           Adams Street 2012 Global Fund         59.936           Adams Street 2012 Global Fund         59.936           Adams Street 2009 Global Offering         83.903           Adams Street 2008 Global Offering         77.806           Adams Street 2009 Global Opportunities Portfolio         46.413           Adams Street Global Secondary Fund 5         11.555           Adams Street Global Secondary Fund 5         11.555           Adams Street 2004 Non-U.S. Fund         12.422           Fairview Lincoln Fund I         33.319           Muller and Monroe Emerging PEFF         496           Muller and Monroe MPEFF         9.223           Pantheon Europe Fund III         27.486           Pantheon Europe Fund VII         27.486           Pantheon Multi-Strategy Program 2014         34.525           Pantheon Global         78           Pantheon USA IX         78           Pantheon USA IXII         36.57           Pantheon USA IXII         36.57           Pantheon USA IX		
Adams Street Partners       77,499         Adams Street 2016 Global Fund       10,894         Adams Street 2015 Global Fund       53,674         Adams Street 2013 Global Fund       69,560         Adams Street 2013 Global Fund       59,396         Adams Street 2009 Global Offering       83,903         Adams Street 2008 Global Offering       83,903         Adams Street 2008 Global Offering       77,806         Adams Street Global Opportunities Portfolio       46,413         Adams Street Global Secondary Fund 5       11,555         Adams Street Global Secondary Fund 6       7,225         Adams Street Global Secondary Fund 1       33,319         Muller and Monroe ILPEFF       496         Muller and Monroe MPEFF       9,223         Pantheon Europe Fund VI       24,431         Pantheon Multi-Strategy Program 2014       34,525         Pantheon Multi-Strategy Program 2014       34,525         Pantheon Global Secondary Fund II       3,857 <td></td> <td></td>		
Adams Street Partners       77,499         Adams Street 2016 Global Fund       10,894         Adams Street 2015 Global Fund       53,674         Adams Street 2013 Global Fund       69,560         Adams Street 2013 Global Fund       59,396         Adams Street 2009 Global Offering       83,903         Adams Street 2008 Global Offering       83,903         Adams Street 2008 Global Offering       77,806         Adams Street Global Opportunities Portfolio       46,413         Adams Street Global Secondary Fund 5       11,555         Adams Street Global Secondary Fund 6       7,225         Adams Street Global Secondary Fund 1       33,319         Muller and Monroe ILPEFF       496         Muller and Monroe MPEFF       9,223         Pantheon Europe Fund VI       24,431         Pantheon Multi-Strategy Program 2014       34,525         Pantheon Multi-Strategy Program 2014       34,525         Pantheon Global Secondary Fund II       3,857 <td>Drivate Equity Managers</td> <td></td>	Drivate Equity Managers	
Adams Street 2016 Global Fund       10,894         Adams Street 2015 Global Fund       34,555         Adams Street 2013 Global Fund       68,360         Adams Street 2012 Global Fund       59,396         Adams Street 2009 Global Offering       83,903         Adams Street 2008 Global Offering       77,806         Adams Street 2007 Global Opportunities Portfolio       46,413         Adams Street Global Opportunities Secondary Fund       5,725         Adams Street Global Secondary Fund 5       11,555         Adams Street 2004 Non-U.S. Fund       12,422         Fairview Lincoln Fund I       33,319         Muller and Monroe Emerging PEFF       496         Muller and Monroe MPEFF       9,223         Pantheon Europe Fund III       10,347         Pantheon Europe Fund VI       24,431         Pantheon Multi-Strategy Program 2014       34,525         Pantheon Molti-Strategy Program 2014       34,525         Pantheon Global       78         Pantheon USA IX       71,957         Pantheon USA VIII       84,089         Pantheon USA VIII       84,089         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt       110,704         <		77 /00
Adams Street 2015 Global Fund       34,555         Adams Street 2014 Global Fund       68,360         Adams Street 2012 Global Fund       59,396         Adams Street 2009 Global Fund       83,903         Adams Street 2009 Global Offering       83,903         Adams Street 2008 Global Offering       77,806         Adams Street Global Opportunities Portfolio       46,413         Adams Street Global Opportunities Secondary Fund       5,725         Adams Street Global Secondary Fund 5       11,555         Adams Street Global Secondary Fund 5       11,555         Adams Street Pund Monroe Ingeriging PEF       7,307         Muller and Monroe Emerging PEF       7,307         Muller and Monroe MPEFF       9,223         Pantheon Europe Fund III       10,347         Pantheon Europe Fund VI       24,431         Pantheon Multi-Strategy Program 2014       34,525         Pantheon Global Secondary Fund II       7,806         Pantheon USA IX       71,957         Pantheon USA VIII       84,089         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt       184,234         Colchester Local Markets Debt Fund       110,704         Progress Emerging Markets Debt Blen		
Adams Street 2014 Global Fund       53,674         Adams Street 2013 Global Fund       68,360         Adams Street 2019 Global Fund       39,996         Adams Street 2009 Global Offering       83,903         Adams Street 2008 Global Offering       77,806         Adams Street 2007 Global Opportunities Portfolio       46,413         Adams Street Global Secondary Fund       5,725         Adams Street Global Secondary Fund 5       11,555         Adams Street 2004 Non-U.S. Fund       12,422         Fairview Lincoln Fund I       33,319         Muller and Monroe Emerging PEFF       496         Muller and Monroe MPEFF       9,223         Pantheon Europe Fund III       10,347         Pantheon Europe Fund VII       24,431         Pantheon Europe Fund VII       27,486         Pantheon Global       78         Pantheon Global Secondary Fund II       3,857         Pantheon USA IX       71,957         Pantheon USA IXII       965,127         Emerging Market Debt       115,790         Subtotal       184,234         Colchester Local Markets Select Debt       184,234         Colchester Local Markets Debt Fund       110,704         Progress Emerging Markets Debt Elnd       199,613 <td></td> <td></td>		
Adams Street 2013 Global Fund       68,360         Adams Street 2010 Global Fund       59,396         Adams Street 2008 Global Offering       77,806         Adams Street 2008 Global Offering       77,806         Adams Street 2007 Global Opportunities Portfolio       46,413         Adams Street Global Opportunities Secondary Fund       5,725         Adams Street Global Secondary Fund 5       11,555         Adams Street 2004 Non-U.S. Fund       12,422         Fairview Lincoln Fund I       33,319         Muller and Monroe Emerging PEFF       496         Muller and Monroe Emerging PEFF       496         Muller and Monroe MPEFF       9,223         Pantheon Europe Fund III       10,347         Pantheon Europe Fund VI       24,431         Pantheon Multi-Strategy Program 2014       34,525         Pantheon Global       78         Pantheon Global Secondary Fund II       3,857         Pantheon USA IXI       71,957         Pantheon USA VIII       84,089         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt       184,234         Colchester Local Markets Debt Fund       110,704         Progress Emerging Markets Debt Blend       199,613		
Adams Street 2012 Global Fund       59,396         Adams Street 2009 Global Offering       33,903         Adams Street 2007 Global Opportunities Portfolio       46,413         Adams Street Global Opportunities Secondary Fund       5,725         Adams Street Global Secondary Fund 5       11,555         Adams Street 2004 Non-U.S. Fund       12,422         Fairview Lincoln Fund I       33,319         Muller and Monroe Emerging PEFF       7,307         Muller and Monroe INPEFF       496         Muller and Monroe MPEFF       9,223         Pantheon Europe Fund III       10,347         Pantheon Europe Fund VI       24,431         Pantheon Hulti-Strategy Program 2014       24,431         Pantheon Global       78         Pantheon Global Secondary Fund II       3,857         Pantheon USA IX       71,957         Pantheon USA IXI       34,825         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt       184,234         Colchester Local Markets Debt Fund       110,704         Progress Emerging Manager       77,097         Prudential Emerging Markets Debt Blend       199,613		
Adams Street 2009 Global Offering       83,903         Adams Street 2008 Global Offering       77,806         Adams Street 2007 Global Opportunities Portfolio       46,413         Adams Street Global Opportunities Secondary Fund       5,725         Adams Street 2004 Non-U.S. Fund       11,555         Adams Street 2004 Non-U.S. Fund I       33,319         Muller and Monroe Emerging PEFF       7,307         Muller and Monroe ILPEFF       496         Muller and Monroe MPEFF       9,223         Pantheon Europe Fund III       10,347         Pantheon Europe Fund VI       24,431         Pantheon Europe Fund VI       27,486         Pantheon Multi-Strategy Program 2014       34,525         Pantheon Global       78         Pantheon Global Secondary Fund II       3,857         Pantheon USA IX       71,957         Pantheon USA VIII       84,089         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt       184,234         BlueBay Emerging Markets Select Debt       110,704         Colchester Local Markets Debt Fund       110,704         Progress Emerging Manager       77,097         Prudential Emerging Markets Debt Blend       199,613 <td></td> <td></td>		
Adams Street 2008 Global Offering       77,806         Adams Street 2007 Global Opportunities Portfolio       46,413         Adams Street Global Opportunities Secondary Fund 5       5,725         Adams Street Global Secondary Fund 5       11,555         Adams Street 2004 Non-U.S. Fund 1       33,319         Muller and Monroe Eureging PEFF       7,307         Muller and Monroe ILPEFF 4       496         Muller and Monroe MPEFF 9,223       9,223         Pantheon Europe Fund III 10,347       10,347         Pantheon Europe Fund VI       24,431         Pantheon Europe Fund VII 2,431       27,486         Pantheon Multi-Strategy Program 2014 3,525       78         Pantheon Global Secondary Fund II 3,855       78         Pantheon USA IX 7,1957       79         Pantheon Ventures, Inc. 115,790       115,790         Subtotal 8,089       965,127         Emerging Market Debt       184,234         Clochester Local Markets Select Debt 110,704       110,704         Progress Emerging Markets Debt Fund 110,704       110,704         Progress Emerging Manager 7,70,97       7,097         Prudential Emerging Markets Debt Blend 199,613		
Adams Street 2007 Global Opportunities Portfolio       46.413         Adams Street Global Opportunities Secondary Fund       5,725         Adams Street Global Secondary Fund 5       11,555         Adams Street 2004 Non-U.S. Fund       12,422         Fairview Lincoln Fund I       33,319         Muller and Monroe Emerging PEFF       496         Muller and Monroe ILPEFF       496         Muller and Monroe MPEFF       9,223         Pantheon Europe Fund III       10,347         Pantheon Europe Fund VI       24,431         Pantheon Hurope Fund VII       27,486         Pantheon Multi-Strategy Program 2014       34,525         Pantheon Global       78         Pantheon Global Secondary Fund II       3,857         Pantheon USA IX       71,957         Pantheon USA VIII       84,089         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt       184,234         Colchester Local Markets Debt Fund       110,704         Progress Emerging Manager       77,097         Prudential Emerging Markets Debt Blend       199,613	<del>_</del>	
Adams Street Global Opportunities Secondary Fund 5       5,725         Adams Street Global Secondary Fund 5       11,555         Adams Street 2004 Non-U.S. Fund       12,422         Fairview Lincoln Fund I       33,319         Muller and Monroe Emerging PEFF       7,307         Muller and Monroe ILPEFF       496         Muller and Monroe MPEFF       9,223         Pantheon Europe Fund III       10,347         Pantheon Europe Fund VI       24,431         Pantheon Hurope Fund VII       27,486         Pantheon Global       78         Pantheon Global       78         Pantheon USA IX       71,957         Pantheon USA IX       71,957         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt       184,234         Colchester Local Markets Select Debt       184,234         Colchester Local Markets Debt Fund       110,704         Progress Emerging Manager       77,097         Prudential Emerging Markets Debt Blend       199,613	<del>_</del>	
Adams Street Global Secondary Fund 5       11,555         Adams Street 2004 Non-U.S. Fund       12,422         Fairview Lincoln Fund I       33,319         Muller and Monroe Emerging PEFF       7,307         Muller and Monroe ILPEFF       496         Muller and Monroe MPEFF       9,223         Pantheon Europe Fund III       10,347         Pantheon Europe Fund VI       24,431         Pantheon Europe Fund VII       27,486         Pantheon Multi-Strategy Program 2014       34,525         Pantheon Global       78         Pantheon USA IX       71,957         Pantheon USA VIII       84,089         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt       184,234         Colchester Local Markets Debt Fund       110,704         Progress Emerging Manager       77,097         Prudential Emerging Markets Debt Blend       199,613	· ·	
Adams Street 2004 Non-U.S. Fund I       12,422         Fairview Lincoln Fund I       33,319         Muller and Monroe Emerging PEFF       7,307         Muller and Monroe ILPEFF       496         Muller and Monroe MPEFF       9,223         Pantheon Europe Fund III       10,347         Pantheon Europe Fund VI       24,431         Pantheon Europe Fund VII       27,486         Pantheon Global       78         Pantheon Global Secondary Fund II       3,857         Pantheon USA IX       71,957         Pantheon USA VIII       84,089         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt       184,234         Colchester Local Markets Debt Fund       110,704         Progress Emerging Manager       77,097         Prudential Emerging Markets Debt Blend       199,613		
Fairview Lincoln Fund I       33,319         Muller and Monroe Emerging PEFF       7,307         Muller and Monroe ILPEFF       496         Muller and Monroe MPEFF       9,223         Pantheon Europe Fund III       10,347         Pantheon Europe Fund VI       24,431         Pantheon Europe Fund VII       27,486         Pantheon Multi-Strategy Program 2014       34,525         Pantheon Global       78         Pantheon USA IX       71,957         Pantheon USA VIII       84,089         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt       184,234         Colchester Local Markets Debt Fund       110,704         Progress Emerging Manager       77,097         Prudential Emerging Markets Debt Blend       199,613		
Muller and Monroe Emerging PEFF       7,307         Muller and Monroe ILPEFF       496         Muller and Monroe MPEFF       9,223         Pantheon Europe Fund III       10,347         Pantheon Europe Fund VI       24,431         Pantheon Europe Fund VII       27,486         Pantheon Multi-Strategy Program 2014       34,525         Pantheon Global       78         Pantheon Global Secondary Fund II       3,857         Pantheon USA IX       71,957         Pantheon USA VIII       84,089         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt       184,234         Colchester Local Markets Select Debt       184,234         Colchester Local Markets Debt Fund       110,704         Progress Emerging Manager       77,097         Prudential Emerging Markets Debt Blend       199,613	Adams Street 2004 Non-U.S. Fund	12,422
Muller and Monroe ILPEFF       496         Muller and Monroe MPEFF       9,223         Pantheon Europe Fund III       10,347         Pantheon Europe Fund VI       24,431         Pantheon Multi-Strategy Program 2014       34,525         Pantheon Global       78         Pantheon Global Secondary Fund II       3,857         Pantheon USA IX       71,957         Pantheon USA VIII       84,089         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt       184,234         Colchester Local Markets Debt Fund       110,704         Progress Emerging Manager       77,097         Prudential Emerging Markets Debt Blend       199,613	Fairview Lincoln Fund I	33,319
Muller and Monroe MPEFF       9,223         Pantheon Europe Fund III       10,347         Pantheon Europe Fund VI       24,431         Pantheon Europe Fund VII       27,486         Pantheon Multi-Strategy Program 2014       34,525         Pantheon Global       78         Pantheon Global Secondary Fund II       3,857         Pantheon USA IX       71,957         Pantheon USA VIII       84,089         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt       184,234         Colchester Local Markets Select Debt       110,704         Progress Emerging Manager       77,097         Prudential Emerging Markets Debt Blend       199,613	Muller and Monroe Emerging PEFF	7,307
Pantheon Europe Fund III       10,347         Pantheon Europe Fund VI       24,431         Pantheon Europe Fund VII       27,486         Pantheon Multi-Strategy Program 2014       34,525         Pantheon Global       78         Pantheon Global Secondary Fund II       3,857         Pantheon USA IX       71,957         Pantheon USA VIII       84,089         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt       184,234         Colchester Local Markets Debt Fund       110,704         Progress Emerging Manager       77,097         Prudential Emerging Markets Debt Blend       199,613	Muller and Monroe ILPEFF	496
Pantheon Europe Fund VI       24,431         Pantheon Europe Fund VII       27,486         Pantheon Multi-Strategy Program 2014       34,525         Pantheon Global       78         Pantheon Global Secondary Fund II       3,857         Pantheon USA IX       71,957         Pantheon USA VIII       84,089         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt       184,234         Colchester Local Markets Select Debt       184,234         Colchester Local Markets Debt Fund       110,704         Progress Emerging Manager       77,097         Prudential Emerging Markets Debt Blend       199,613	Muller and Monroe MPEFF	9,223
Pantheon Europe Fund VII       27,486         Pantheon Multi-Strategy Program 2014       34,525         Pantheon Global       78         Pantheon Global Secondary Fund II       3,857         Pantheon USA IX       71,957         Pantheon USA VIII       84,089         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt       184,234         Colchester Local Markets Select Debt       184,234         Colchester Local Markets Debt Fund       110,704         Progress Emerging Manager       77,097         Prudential Emerging Markets Debt Blend       199,613	Pantheon Europe Fund III	10,347
Pantheon Europe Fund VII       27,486         Pantheon Multi-Strategy Program 2014       34,525         Pantheon Global       78         Pantheon Global Secondary Fund II       3,857         Pantheon USA IX       71,957         Pantheon USA VIII       84,089         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt       184,234         Colchester Local Markets Select Debt       184,234         Colchester Local Markets Debt Fund       110,704         Progress Emerging Manager       77,097         Prudential Emerging Markets Debt Blend       199,613	Pantheon Europe Fund VI	24,431
Pantheon Multi-Strategy Program 2014       34,525         Pantheon Global       78         Pantheon Global Secondary Fund II       3,857         Pantheon USA IX       71,957         Pantheon USA VIII       84,089         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt         BlueBay Emerging Markets Select Debt       184,234         Colchester Local Markets Debt Fund       110,704         Progress Emerging Manager       77,097         Prudential Emerging Markets Debt Blend       199,613		27,486
Pantheon Global       78         Pantheon Global Secondary Fund II       3,857         Pantheon USA IX       71,957         Pantheon USA VIII       84,089         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt         BlueBay Emerging Markets Select Debt       184,234         Colchester Local Markets Debt Fund       110,704         Progress Emerging Manager       77,097         Prudential Emerging Markets Debt Blend       199,613	Pantheon Multi-Strategy Program 2014	
Pantheon Global Secondary Fund II       3,857         Pantheon USA IX       71,957         Pantheon USA VIII       84,089         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt       184,234         Colchester Local Markets Debt Fund       110,704         Progress Emerging Manager       77,097         Prudential Emerging Markets Debt Blend       199,613	93 9	
Pantheon USA IX       71,957         Pantheon USA VIII       84,089         Pantheon Ventures, Inc.       115,790         Subtotal       965,127         Emerging Market Debt         BlueBay Emerging Markets Select Debt       184,234         Colchester Local Markets Debt Fund       110,704         Progress Emerging Manager       77,097         Prudential Emerging Markets Debt Blend       199,613		
Pantheon USA VIII Pantheon Ventures, Inc. Subtotal  Emerging Market Debt  BlueBay Emerging Markets Select Debt Colchester Local Markets Debt Fund Progress Emerging Manager Prudential Emerging Markets Debt Blend  84,089 965,127  Emerging Market Debt 110,790 110,790 110,790 110,791 199,613		
Pantheon Ventures, Inc. Subtotal  Emerging Market Debt  BlueBay Emerging Markets Select Debt Colchester Local Markets Debt Fund Progress Emerging Manager Prudential Emerging Markets Debt Blend  115,790 965,127  184,234 110,704 110,704 110,704 110,704 110,704 110,705		
Subtotal965,127Emerging Market Debt184,234BlueBay Emerging Markets Select Debt184,234Colchester Local Markets Debt Fund110,704Progress Emerging Manager77,097Prudential Emerging Markets Debt Blend199,613		
BlueBay Emerging Markets Select Debt 184,234 Colchester Local Markets Debt Fund 110,704 Progress Emerging Manager 77,097 Prudential Emerging Markets Debt Blend 199,613	•	
BlueBay Emerging Markets Select Debt 184,234 Colchester Local Markets Debt Fund 110,704 Progress Emerging Manager 77,097 Prudential Emerging Markets Debt Blend 199,613	Emerging Market Debt	
Colchester Local Markets Debt Fund 110,704 Progress Emerging Manager 77,097 Prudential Emerging Markets Debt Blend 199,613		10/ 27/
Progress Emerging Manager 77,097 Prudential Emerging Markets Debt Blend 199,613		
Prudential Emerging Markets Debt Blend 199,613		
Sudtotal \$ 571,648		
	Subrorgi	\$ 5/1,648

# **INVESTMENT ALLOCATION**

# Defined Benefit Plan Investment Allocation June 30, 2017 (\$ thousands)

	Fair Value
Fixed Income Managers	
Cash	\$ 283,056
State Street Global Advisors	609,656
Garcia Hamilton & Associates	311,274
LM Capital Group	163,021
Neuberger Berman	345,606
Pacific Investment Management Company - Total Return	417,212
Pacific Investment Management Company - Unconstrained	473,117
Progress Emerging Managers	145,895
Pugh Capital Management	162,414
Smith Graham & Company	104,648
TCW Metropolitan West Asset Management Subtotal	<u>542,916</u> 3,558,815
Treasury Inflation-Protected Securities	
RhumbLine Advisers	680,137
Subtotal	680,137
Direct Real Estate Blue Vista Real Estate Partners IV	10.677
	18,633
Brookfield Strategic Real Estate Partners II Courtland/Pru Real Estate Global Partnership II	21,281
·	38,721
Crow Holdings Realty Partners VII  Dune Real Estate Parallel Fund II	26,159 24,197
Dune Real Estate Fund III	89,397
Franklin Templeton EMREFF	32,957
Franklin Templeton FTPREF	12,138
Franklin Templeton MDP Real Estate 2015	11,600
Heitman America Real Estate Trust	196,755
JPMCB Strategic Property Fund	201,753
RREEF America III Fund	261,733
RREEF West VI Fund	136
UBS Trumbull Property Fund	375,558
Subtotal	1,049,550
Real Estate Investment Securities	
BTC Developed Real Estate Index	701,890
Subtotal	701,890
Cash Overlay Parametric Clifton	77 400
	73,489 73,489
Subtotal	75,489
Hedged Strategies  KKR Prisma Codlin Fund	449,466
PAAMCO Newport Monarch Fund	450,360
Subtotal	899,826
Commodities	070 507
Invesco Balanced Risk Commodity Trust PIMCO Commodity Alpha Fund	232,527
Subtotal	97,311 329,838
Infrastructure Managers	
Alinda Capital Partners	35,072
Macquarie Infrastructure Partners II	33,866
Macquarie Infrastructure Partners III	39,864
Subtotal	108,802
SMP Forfeiture/Disability Reserves	(112,025)(B
Total Fund	<u>\$ 18,221,369</u> (A

 $<sup>(</sup>A) \ A mount includes net pending transactions of (\$386,563) \ and accrued investment income receivable of \$45,836. \\$ 

<sup>(</sup>B) These assets are commingled with the SURS defined benefit plan investments.

# Top 50 Brokers and Total Domestic Equity Investment Commissions For the Year Ended June 30, 2017

		2017	
Investment Brokerage Firm	Commission	Shares Traded	Commission per Share
Loop Capital Markets	\$ 238,075	13,274,854	\$ 0.03
Credit Suisse	133,759	4,680,527	0.03
Cheevers & Company	124,815	5,409,949	0.03
Williams Capital Group	116,402	6,344,977	0.03
CastleOak Securities	97,674	3,447,029	0.03
Barclays	60,634	1,969,624	0.03
Robert W. Baird & Company	60,618	1,693,984	0.04
Stifel, Nicolaus & Company	60,552	1,763,411	0.03
ITG (Investment Technology Group)	57,477	1,952,475	0.03
CAPIS (Capital Institutional Services)	57,104	1,780,277	0.03
Cabrera Capital Markets	49,742	2,788,043	0.03
Merrill Lynch	49,399	3,839,550	0.01
Interstate Group	46,338	1,534,908	0.03
Goldman Sachs	43,262	1,525,567	0.03
JP Morgan Chase & Company	37,487	2,381,441	0.02
William Blair & Company	36,093	1,183,611	0.03
Stephens	32,405	1,071,458	0.03
M Ramsey King Securities	28,303	1,138,521	0.02
Craig-Hallum	25,717	850,695	0.03
Jefferies & Company	22,915	839,792	0.03
Piper Jaffray & Company	22,201	740,918	0.03
Jones Trading Institutional Services	19,808	672,119	0.03
Liquidnet	19,138	683,174	0.02
CL King & Associates	17,834	579,793	0.03
Raymond James & Associates	15,819	503,586	0.03
Telsey Advisory Group	15,257	481,887	0.03
Penserra Securities	14,805	505,010	0.03
KeyBanc Capital Markets	14,433	489,794	0.03
		383,229	0.03
SunTrust Robinson Humphrey BNY Mellon	13,387 13,091	436,350	0.03
		360.727	0.03
Morgan Stanley	9,792		0.03
Needham & Company	9,672	322,315	
Mischler Financial Group	9,063	608,856	0.01
ROTH Capital Partners	8,348	278,278	0.03
Instinet	8,052	304,003	0.03
Sidoti & Company	7,458	149,155	0.05
Wells Fargo Advisors	7,446	247,801	0.03
Canaccord Adams	6,789	225,392	0.03
Northland Securities	6,371	212,372	0.03
RBC Capital Markets	6,115	333,848	0.03
Leerink Swann & Company	6,084	202,795	0.03
Citigroup Global Markets	5,713	298,916	0.03
JMP Securities	4,983	165,919	0.03
Deutsche Bank	4,813	150,246	0.03
Cowen & Company	4,803	156,339	0.03
Bloomberg Tradebook	4,671	155,667	0.04
Keefe, Bruyette & Woods	4,658	143,636	0.03
Dougherty & Company	4,453	148,425	0.03
Guzman & Company	4,343	403,057	0.01
First Analysis Securities	4,143	138,106	0.03
All Other Brokers	90,646	3,456,922	0.03
Grand Totals, All Brokers	\$ 1,762,960	73,409,328	\$ 0.02

Top 50 Brokers and Total International Equity Investment Commissions For the Year Ended June 30, 2017

	2017			
Investment Brokerage Firm	Commission	Shares Traded	Commission per Share	
Instinet	\$ 181,797	23,346,640	\$ 0.01	
Loop Capital Markets	172,419	21,539,674	0.01	
UBS	156,185	17,457,137	0.01	
North South Capital	146,029	4,943,833	0.03	
Bank of New York ConvergEx Execution	117,538	10,635,801	0.01	
ITG (Investment Technology Group)	105,227	12,453,516	0.01	
Goldman Sachs	82,275	12,275,293	0.01	
Jefferies & Company	80,118	10,267,741	0.01	
Deutsche Bank	75,229	7,617,518	0.02	
BTIG (Bass Trading International Group)	69,220	3,510,315	0.02	
CLSA	64,920	25,016,475	0.01	
Citigroup Global Markets	62,076	8,648,447	0.01	
Credit Suisse	47,213	5,350,687	0.01	
Cheevers & Company	45,323	4,526,882	0.01	
M Ramsey King Securities	44,086	13,563,400	0.00	
Penserra Securities	44,036	6,116,292	0.01	
Morgan Stanley	32,503	7,044,824	0.01	
Cabrera Capital Markets	27,737	3,729,621	0.01	
Merrill Lynch	27,716	6,980,193	0.00	
Northern Trust Securities	27,200	6,864,281	0.00	
JP Morgan Chase & Company	25,766	2,322,102	0.02	
Macquarie Securities	22,724	2,666,282	0.01	
HSBC	17,848	3,911,818	0.01	
Fig Group LLC	17,273	3,674,600	0.00	
Cowen & Company	13,242	398,400	0.03	
Bloomberg Tradebook	11,269	2,253,806	0.01	
Weeden & Company	11,204	1,656,920	0.01	
Exane	10,994	960,718	0.02	
Barclays	10,829	727,487	0.01	
Liquidnet	9,361	739,813	0.01	
Pavilion Global Markets	8,861	302,000	0.03	
Mischler Financial Group	8,565	1,332,031	0.00	
Wallachbeth Capital	7,224	1,444,709	0.01	
Sanford C. Bernstein	6,752	757,615	0.01	
Tribal Capital Markets	5,718	1,354,500	0.00	
Royal Bank of Canada	4,283	276,131	0.02	
Mizuho Securities  Daiwa Securities Group	4,223 4,024	194,000 221,100	0.02 0.02	
Cantor Fitzgerald	3,822	252,048	0.02	
KCG Holdings	3,622	736,172	0.02	
Societe Generale Securities	2,807	127,484	0.00	
Scotia Capital	1,938	136,900	0.01	
Sumitomo Mitsui Banking Corporation	1,923	416,400	0.02	
Andes Capital Group	1,875	71,100	0.00	
Divine Capital Markets	1,823	72,000	0.03	
BMO Capital Markets	1,601	85,344	0.03	
Knight Execution & Clearing Services	1,271	252,593	0.01	
Williams Capital Group	1,141	260,219	0.00	
Natixis Securities Americas	860	35,983	0.02	
CastleOak Securities	821	24,020	0.03	
All Other Brokers	8,069	1,677,601	0.00	
Grand Totals, All Brokers	\$ 1,840,371	241,230,466	\$ 0.01	

# Top 50 Brokers and Total Global Equity Investment Commissions For the Year Ended June 30, 2017

		2017	
Investment Brokerage Firm	Commission	Shares Traded	Commission per Share
Goldman Sachs	\$ 64,008	7,293,660	\$ 0.01
Morgan Stanley	63,252	7,645,583	0.01
UBS	50,692	7,534,837	0.01
JP Morgan Chase & Company	50,680	7,555,180	0.01
Bank of America	46,500	6,760,481	0.01
Citigroup Global Markets	46,004	4,367,489	0.01
Sanford C. Bernstein	44,848	5,017,582	0.04
Cheevers & Company	44,552	623,551	0.07
Credit Suisse	43,793	4,291,712	0.02
Loop Capital Markets	35,650	6,020,323	0.04
Deutsche Bank	35,460	4,163,956	0.01
Cabrera Capital Markets	32,855	1,591,979	0.02
Mischler Financial Group	30,293	1,392,000	0.02
Barclays	27,443	1,592,143	0.04
Telsey Advisory Group	26,645	746,534	0.04
Instinet	24,704	2,523,453	0.01
Jefferies & Company	22,934	1,983,167	0.02
Macquarie Securities	19,733	2,114,841	0.01
CLSA	17,897	4,521,239	0.01
Academy Securities	16,250	556,097	0.03
RBC Capital Markets	15,956	1,346,718	0.02
Nomura	14,785	2,414,488	0.01
Liquidnet	14,773	4,601,175	0.00
Exane	14,262	2,630,751	0.00
Merrill Lynch	13,349	8,660,551	0.00
Penserra Securities	11,931	205,404	0.06
ITG (Investment Technology Group)	10,925	4,900,543	0.00
CastleOak Securities	10,179	316,900	0.03
Autonomous Research	8,847	1,630,564	0.01
Redburn Partners	8,799	492,321	0.06
Drexel Hamilton	8,259	237,873	0.03
Evercore Partners	7,546	697,094	0.05
BMO Capital Markets	6,880	236,856	0.03
HSBC	6,681	1,438,357	0.01
Robert W. Baird & Company	6,634	171,822	0.04
Banco Itau	6,068	371,109	0.02
BTIG (Bass Trading International Group)	5,021	177,538	0.03
Guzman & Company Wells Fargo Advisors	4,796	193,034	0.02 0.04
Daiwa Securities Group	4,713 4,580	404,246	0.04
Cowen & Company	4,580 4,472	329,687 108,949	0.03
Bank of America Securities	4,369	608,121	0.04
Mizuho Securities	4,175	175,209	0.01
CL King & Associates	4,175	117,766	0.02
Renaissance Capital	4,017	290,365	0.03
SMBC Nikko Securities	3,948	64,200	0.01
Virtu Financial Capital Markets	3,485	348,549	0.06
Sturdivant and Company	3,431	137,424	0.01
Kepler Capital Markets	3,396	171,265	0.02
Credit Agricole	3,141	2,134,168	0.02
All Other Brokers	87,707	6,082,441	0.00
Grand Totals, All Brokers	\$ 1,055,439	119,991,295	\$ 0.01

# Top 50 Brokers and Total Fixed Income Investment Brokerage For the Year Ended June 30, 2017

	2017
Investment Brokerage Firm	Fair Value Traded
CastleOak Securities	\$ 1,324,940,275
Loop Capital Markets	893,689,610
Credit Suisse	803,905,659
Goldman Sachs	704,156,270
Barclays	670,363,043
JP Morgan Chase & Company	624,129,024
Citigroup Global Markets	574,065,695
Nomura	488,761,953
Morgan Stanley	331,739,678
Deutsche Bank	317,569,242
Wells Fargo Advisors	251,027,777
Bank of America	222,034,088
BNP Paribas	198,773,580
RBS Securities	160,227,005
Cabrera Capital Markets	126,025,687
Merrill Lynch	124,973,934
Mischler Financial Group RBC Dain Rauscher	96,405,223
Jefferies & Company	88,361,334 77,067,994
Williams Capital Group	77,067,994
Drexel Hamilton	75,330,147
Citibank	66,972,312
BMO Capital Markets	59,256,505
HSBC	53,846,793
RBC Capital Markets	51,867,622
Bank of America Securities	48,787,979
UBS	48,310,089
Brean Capital	46,183,563
State Street Bank & Trust	45,048,274
FTN Financial Capital Markets	43,977,600
Mizuho Securities	38,719,726
MFR Securities	33,622,093
Amherst Securities Group	32,158,797
TD Securities	29,570,977
Royal Bank of Canada	29,277,885
ABN Amro	28,810,340
CAPIS (Capital Institutional Services)	27,572,408
Daiwa Securities Group	17,913,722
Robert W. Baird & Company	17,638,228
Societe Generale Securities	16,565,099
Mitsubishi UFJ Securities	15,589,939
BNY Mellon	15,134,120
Stifel, Nicolaus & Company	14,798,944
SunTrust Robinson Humphrey	14,454,334
KeyBanc Capital Markets	12,661,243
First Tennessee	11,924,122
MF Global	10,420,978
Ramirez & Company	9,994,400
SG Americas Securities	9,937,517
Royal Bank of Scotland All Other Brokers	9,796,045 140,920,703
	140,820,703
Grand Totals, All Brokers	\$ 9,231,013,072



# ACTUARIAL

- ☐ LETTER OF CERTIFICATION
- ☐ ACTUARIAL REPORT
- ANALYSIS OF FUNDING
- ☐ TESTS OF FINANCIAL SOUNDNESS

The Comprehensive Annual Financial Report for Fiscal Year Ended June 30, 2017

### LETTER OF CERTIFICATION



P: 312.456.9800 | F: 312.683.3271 | www.grsconsulting.com

December 12, 2017

**Board of Trustees** State Universities Retirement System of Illinois 1901 Fox Drive Champaign, IL 61820

Re: Certification of Actuarial Results

Dear Members of the Board:

At your request, we have performed an actuarial valuation of the State Universities Retirement System of Illinois ("SURS") as of June 30, 2017. The purpose of this actuarial valuation, which is performed annually, is to determine the funding status and annual contribution requirements of SURS. GRS has prepared this actuarial valuation exclusively at the request of, and for the benefit of, the Trustees of the State Universities Retirement System; GRS is not responsible for reliance upon this actuarial valuation for any other purpose or by any other party.

- a. Data relative to the Members of SURS Data for all members, including those participating in the Self Managed Plan, was provided by SURS staff. GRS reviewed such data for
- b. Assets of the Fund The values of SURS assets are provided by SURS staff and were reviewed for reasonableness, but were not verified or audited. First effective with the actuarial valuation as of June 30, 2009, the actuarial value of assets, as defined in statute, smoothes investment gains and losses compared to the actuarial assumption of 7.25% (7.75% prior to fiscal year 2015 and 8.50% prior to fiscal year 2011) over a five-year period, and is calculated by the actuary and used to develop actuarial results
- Benefit Provisions The benefit provisions for members hired on or after January 1, 2011, were changed under Public Act 96-0889. PA 100-0023, which is effective July 6, 2017, creates a new plan option (Optional Hybrid Plan) which is assumed to be available for members to elect beginning July 1, 2019.
- d. Actuarial Cost Method The actuarial cost method prescribed in the statute and utilized by SURS is the Projected Unit Credit Cost Method. The objective of this method is to finance the benefits of SURS as such benefits accrue to each member. Any Unfunded Actuarial Accrued Liability (UAAL) under this method is separately financed. All actuarial gains and losses under this method are reflected in the UAAL.
  - e. Actuarial Assumptions The actuarial assumptions used in this actuarial valuation are summarized in the next few pages. The Effective Rate of Interest (ERI) assumption was decreased from 7.75% to 7.00% first effective with the actuarial valuation as of June 30, 2013. The investment return assumption was decreased from 7.75% to 7.25% first. effective with the actuarial valuation as of June 30, 2014. The remaining actuarial assumptions were reviewed and updated as part of the experience study conducted for the period June 30, 2010, through June 30, 2014, and adopted by the Board first effective for the actuarial valuation as of June 30, 2015. Assumptions for new hire elections were updated to include the new Optional Hybrid Plan under PA 100-0023 beginning July 1, 2019.

The actuarial assumptions and methods used to calculate the actuarial liabilities, including the economic and demographic assumptions and the actuarial cost method, are in accordance with the Actuarial Standards of Practice. The actuarial assumptions are set by the Board and the actuarial cost method is prescribed in the statute. Calculations performed for GASB Statement Number 67 were performed in accordance with the requirements under the Statement, including the use of the Entry Age Normal Cost Method and a single discount rate of 7.09% for fiscal year ending June 30, 2017. Liabilities as of June 30, 2016, projected to June 30, 2017, were used for the GASB 67 schedules.

The trend data in the Financial Section and the schedules and other data in this Section are prepared by SURS staff with our input.

The funding objective as defined in the statute is to collect employer and employee contributions sufficient to provide the benefits of SURS when due and to achieve an asset value equal to 90% of the Actuarial Accrued Liability by the end of fiscal year 2045. The financing objective of SURS and the funding process to reach that objective are set out in Section 15-155 of the SURS Article of the Illinois Pension Code. Under the provisions of PA 100-0023, employers make contributions beginning in fiscal year 2018 for new members and for the portion of payroll for current members in excess of the Governor's pay

The statutory funding policy set out in Section 15-155 of the Illinois Pension Code results in a near-term contribution requirement that is less than a reasonable actuarially determined contribution. We recommend the development and adherence to a funding policy that funds the normal cost of the plan as well as an amortization payment that would seek to pay off any unfunded accrued liability over a closed period at least as long as 15 years (to limit contribution volatility) and no more than the period of time in order attain 100% funding by 2045 (27 years remaining in the actuarial valuation as of June 30, 2017). This letter does not certify that the funding method in the statute complies with generally accepted actuarial standards for the funding

To the best of our knowledge, this actuarial statement is complete and accurate, fairly presents the actuarial position of SURS as of June 30, 2017, based on the data and actuarial techniques described above and applicable statutes, and has been prepared in accordance with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board, except where otherwise noted.

Future actuarial measurements may differ significantly from the current measurements presented in this actuarial valuation due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions, contribution amounts or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements in this report.

The signing actuaries are independent of the plan sponsor.

Amy Williams, Lance Weiss and Alex Rivera are Members of the American Academy of Actuaries ("MAAA") and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Respectfully submitted,

Umy Williams Amy Williams, ASA, MAAA, FCA

Consultant

Lance J. Weiss, EA/MAAA, FCA

alex Rivera

120 North LaSalle Street | Suite 1350 | Chicago, Illinois 60602-3495

#### **Pension Financing**

The State Universities Retirement System of Illinois (SURS) is financed by non-employer contributing entity contributions (State appropriations), employee contributions, employer contributions (trust, federal and grant funds), and investment earnings. Employee contributions are established by the Illinois Compiled Statutes at 8% of pay. Investment earnings and state funding are primary determinants of the System's financial status.

Non-employer contributing entity and employer contributions are determined through annual actuarial valuations. Actuaries use demographic data (such as employee age, salary, and service credits), economic assumptions (such as estimated salary increases and interest rates), and decrement assumptions (such as employee turnover, mortality, and disability rates) in performing these valuations.

Under the Illinois Compiled Statutes (40 ILCS 5/15-155), the required employer contributions (statutory contribution) under the statutory funding plan are calculated by the actuaries on an annual basis. To determine the statutory contribution, the actuary calculates the actuarial accrued liability and the actuarial value of assets. The normal cost for the active members is equal to the portion of the actuarial accrued liability assigned to this year. Any shortfall between the actuarial value of assets and the actuarial accrued liability is referred to as the unfunded actuarial accrued liability. The unfunded actuarial accrued liability is amortized over a 30-year closed amortization period.

#### **Actuarial Asset Valuation**

The actuarial value of assets is used in determining the funding progress of the System and in establishing the employer contribution rates necessary to adhere to the statutory funding plan. The actuarial value of assets is based on a smoothed expected income investment rate of 7.25%. Investment income in excess or shortfall of the expected 7.25% rate on fair value is smoothed over a five-year period with 20% of a year's excess or shortfall being recognized each year beginning with the current year. The use of this actuarial method began with the valuation for the period ending June 30, 2009, as required by Public Act 96-0043, which was signed into law on July 15, 2009.

In addition to an annual actuarial valuation, SURS periodically undertakes an actuarial audit by an independent firm. An actuarial audit is conducted to ensure that the actuarial valuation and other actuarial processes are performed accurately and that the methods and assumptions utilized are reasonable and prudent. An actuarial audit was performed and completed by Segal Consulting June 2016. The results of the audit were favorable and concluded that the calculations, method and assumptions were reasonable.

### **Actuarial Cost Method**

For financial reporting, the entry age actuarial cost method is applied in accordance with the Governmental Accounting Standards Board (GASB) Statements 67 and 68. For purposes of determining the System's funding calculation of the non-employer contributing entity and employer contribution, the projected unit credit cost method is used as required by Public Act 96-0043. Under this method, the projected pension at retirement age is first calculated and the value thereof at the individual member's current attained age is determined. The normal cost for the member for the current year is equal to the value so determined divided by the member's projected years of service at retirement. The employer normal cost for fiscal year 2017 was 12.54%. The actuarial liability at any point in time is the value of the projected pensions at that time less the value of future normal costs. For ancillary benefits for active members, in particular disability benefits, death and survivor benefits, termination benefits, and the postretirement increases, the same procedure as outlined above is followed. Estimated annual administrative expenses are added to the normal cost.

### **Employee Data**

Employee data are provided by the administrative staff of the State Universities Retirement System. Various tests are applied to check internal consistency as well as consistency from year to year. No calculations are made for employees not yet hired as of the valuation date.

### Valuation Results For Fiscal Year Ended June 30, 2017 (\$ millions)

#### **Actuarial Liability** Actuarial liability (reserves) For members receiving annuities \$ 28,226.0 26.3% For inactive members 2,650.0 Active Members 10,977.3 For active members 41,853.3 Total 6.3% Inactive Members Actuarial value of assets available for benefits 18,594.3 67.4% Annuitants Unfunded actuarial accrued liability \$ 23,259.0

As of June 30, 2017, the Unfunded Actuarial Accrued Liability (UAAL) to be amortized was \$23,259,022,000.

### Analysis of Financial Experience For Fiscal Year Ended June 30, 2017 (\$ millions)

Unfunded actuarial accrued liability at June 30, 2017

Investments other than 7.25% Salary increases other than 3.75% Age and service retirement differences Termination differences Mortality and disability differences Benefit recipient differences New entrants Other actuarial differences	\$ (142.8) (144.7) (26.0) 10.7 (7.0) 14.2 84.1 (181.7)
Total actuarial gain	\$ (393.2)
Change in the Unfunded Actuarial Accrued Liability (\$ millions)	
Unfunded actuarial accrued liability at July 1, 2016	\$ 23,221.7
Expected increase in unfunded actuarial accrued liability	430.5
Impact of change in actuarial assumptions	-
Total actuarial gain	 (393.2)

23,259.0

### **Summary of Major Actuarial Assumptions**

#### Interest

7.25% per annum, compounded annually (adopted by the SURS Board effective June 30, 2014) for funding purposes. The actuarial assumption rate credited to member accounts is 7.00% per annum (adopted by the SURS Board effective June 30, 2014).

#### ■ Net Position

Assets available for benefits are used at market value.

#### ■ Expenses

As estimated and advised by the SURS staff, based on current expenses with an allowance for expected increases.

The following assumptions were adopted by the SURS Board effective with the June 30, 2015 actuarial valuation. They were developed based upon an experience study completed in February 2015. These assumptions are the same for financial reporting and funding purposes.

#### Termination

Rates of withdrawal are based upon ages and years of service as developed from plan experience. Shown at right is a table of termination rates based upon experience in the 2010-2014 period. The assumption consists of a table of ultimate turnover rates by years of service credit.

#### ■ Mortality

Mortality rates are based upon the RP2014 Mortality White Collar Table with gender distinct, projected using MP-2014 two dimensional mortality improvement scale, set forward one year for male and female annuitants.

#### **Termination Rates**

Years of Service All Mer	
0	0.200
1	0.200
2	0.150
3	0.140
4	0.120
5	0.100
6	0.090
7	0.075
8	0.068
9	0.060
10	0.053
11	0.045
12	0.040
13	0.037
14	0.032
15-19	0.030
20-24	0.025
25-29	0.020

### ■ Salary Increases

Each member's compensation is assumed to increase by 3.75% each year; 2.75% reflecting salary inflation and 1.00% reflecting standard of living increases. That rate is increased for members with less than 34 years of service as shown at right.

The payroll of the entire system is assumed to increase at 3.75% per year for purposes of calculating employer required contributions.

### ■ Retirement Age

Upon eligibility, active members are assumed to retire as shown below.

### ■ Other Assumptions

The disability rates are graduated based on age. The Cost of Living Adjustment (COLA) is 3.00% per annum for members hired before January 1, 2011 based on the benefit provision of 3.00% annual compound increases. The assumed rate is 1.37% for members hired on or after January 1, 2011, based on the provision of increases equal to half of the increase in the Consumer Price Index with a maximum increase of 3.00%. The female spouse is assumed to be three years younger than the male spouse.

### **Annual Compensation Increases**

Years of Service	All Members
0	.1500
1	.1200
2	.0900
3	.0725
4	.0650
5	.0600
6	.0575
7	.0550
8	.0525
9	.0500
10	.0475
11	.0450
12-13	.0425
14-33	.0400
34 & over	.0375

#### **Retirement Rates**

Members Hired Before
January 1, 2011 and Eligible for

Members Hired On or After January 1, 2011 and Eligible for

Age	Normal Retirement	Early Retirement	Normal Retirement	Early Retirement
Under 50	50%	- %	- %	- %
50	45	-	-	-
51	45	-	-	-
52	45	-	-	-
53	40	-	-	-
54	40	-	-	-
55	38	7.5	-	-
56	36	6.0	-	-
57	30	4.5	-	-
58	30	5.5	-	-
59	30	6.0	-	-
60	11	-	-	-
61	11	-	-	-
62	13	-	-	35
63	13	-	-	15
64	13	-	-	15
65	17	-	-	15
66	17	-	-	15
67	15	-	50	-
68	15	-	35	-
69	15	-	30	-
70-74	15	-	15	-
75-79	20	-	20	-
80+	100	-	100	-

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### **Funding Objective**

Beginning in fiscal year 1996 the required contribution rates were based upon Public Act 88-0593, which calls for a 15-year phase-in to a 35-year funding plan which provides for adequate annual funding of the employer's normal cost while amortizing the unfunded actuarial accrued liability. Annual funding under this plan will occur as a continuing appropriation. This method does not conform with the provisions of GASB 67 and 68 for financial reporting. The statutory funding plan requires the State to contribute annually an amount equal to a constant percent of payroll necessary to allow SURS to achieve a 90% funded ratio by fiscal year 2045, subject to any revisions necessitated by actuarial gains or losses, or actuarial assumptions.

### **Employer Contributions Received in Fiscal Year 2017**

State appropriations	\$ 1,442,164,501
State pension fund	170,000,000
Federal/trust/employer funds/other	38,386,223
Total	<b>\$ 1,650,550,724</b>
Reconciliation to Total State Appropriations	
Defined benefit plan-State appropriations received	\$ 1,612,164,501
Defined contribution plan-State appropriations received	59,261,499
Total State appropriations received	<b>\$ 1,671,426,000</b>

The net State appropriation results are based on the projected unit credit actuarial cost method, and on the data provided, and assumptions used, for the June 30, 2017 actuarial valuation.

### **Projected Required Contribution**

Fiscal Year	Assumed % of Payroll	Required Payroll (\$ billions)	Contribution (\$ millions)
2019	36.0%	\$ 4.59	\$ 1,655.2
2020	36.6	4.75	1,740.9
2021	38.3	4.89	1,871.5
2022	38.0	5.01	1,907.8
2023	37.7	5.14	1,938.3

# Projected Required Contribution

\$ (millions) by FY



### **Schedule of Employer Contributions (\$ millions)**

Fiscal		Member	Net ER	Actual ER	<b>ER Contributions</b>	Total Contributions
Year	Total ADC	Contributions	ADC	Contributions	as % of Net ADC	as % of Total ADC
2008	\$ 971.6	\$ 264.1	\$ 707.5	\$ 344.9	48.8%	62.7%
2009	1,147.3	273.3	874.0	451.6	51.7	63.2
2010	1,278.3	275.0	1,003.3	696.6	69.4	76.0
2011	1,519.2	260.2	1,259.0	773.6	61.4	68.0
2012	1,701.6	258.2	1,443.3	985.8	68.3	73.1
2013	1,794.4	245.1	1,549.3	1,401.5	90.5	91.8
2014	1,843.6	283.1	1,560.5	1,502.9	96.3	96.9
2015	1,890.3	267.7	1,622.7	1,528.5	94.2	95.0
2016	2,090.0	278.9	1,811.1	1,582.3	87.4	89.1
2017	2,143.4	278.6	1,864.8	1,650.6	88.5	90.0

<sup>\*</sup>The fiscal year 2015 and 2016 amounts shown above have been corrected from prior year reporting.

In an inflationary economy, the value of dollars is decreasing. This environment results in employee pay increasing in dollar amounts, retirement benefits increasing in dollar amounts, and then, unfunded accrued liabilities increasing in dollar amounts, all at a time when the actual substance of these items may be decreasing. Looking at just the dollar amounts of unfunded accrued liabilities can be misleading. Unfunded accrued liabilities dollars divided by active employee payroll dollars provides a helpful index which shows that the smaller the ratio of unfunded liabilities to active member payroll, the stronger the system. Observation of this relative index over a period of years will give an indication of whether the System is becoming financially stronger or weaker.

### Schedule of Funding Progress (\$ millions)

Fiscal Year**	Actuarial Value of Assets (A)	Actuarial Accrued Liabilities	Unfunded Actuarial Accrued Liabilities	Funding Ratio	Covered Payroll	UAAL as % of Covered Payroll
2008	\$14,586.3	\$ 24,917.7	\$ 10,331.4	58.5%	\$ 3,303.2	312.8%
2009	14,282.0	26,316.2	12,034.2	54.3	3,463.9	347.4
2010	13,966.6	30,120.4	16,153.8	46.4	3,491.1	462.7
2011	13,945.7	31,514.3	17,568.6	44.3	3,460.8	507.6
2012	13,949.9	33,170.2	19,220.3	42.1	3,477.2	552.8
2013	14,262.6	34,373.1	20,110.5	41.5	3,533.9	569.1
2014	15,844.7	37,429.5	21,584.8	42.3	3,522.2	612.8
2015	17,104.6	39.520.7	22,416.1	43.3	3,606.5	621.5
2016	17,701.6	40,923.3	23,221.7	43.3	3,513.1	661.0
2017	18,594.3	41,853.3	23,259.0	44.4	3,458.3	672.6

For FY2017, if calculated using Market Value of Assets of \$18,484.8, the funding ratio is 44.2%.

(A) Per Public Act 96-0043, beginning fiscal year 2009, measures of financial soundness will be calculated using an actuarial value of assets based on a smoothed investment income rate. Investment income in excess or shortfall of the expected 7.25% rate on fair value is smoothed over a five-year period with 20% of a year's excess or shortfall being recognized each year beginning with the current year.

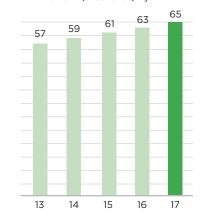
SURS 2017 ANNUAL REPORT

# Schedule of Increases and Decreases of Benefit Recipients 10-Year Summary

#### Fiscal Beginning Ending Year Balance Additions Subtractions Balance 2008 43,395 1.547 45,346 3,498 2009 45,346 3,017 1,553 46,810 2010 46,810 3,599 1,506 48,903 2011 48,903 4,207 1,740 51,370 54,532 2012 51,370 4,782 1,620 2013 54,532 4,529 1,832 57,229 2014 57,229 4,073 1,896 59,406 2015 3,511 1,897 61,020 59,406 2016 61,020 4,058 1,932 63,146 2017 63,146 3,465 2,066 64,545

### **Benefit Recipients**





# **Active Participant Statistics 10-Year Summary**

Fiscal Year	Males	Females	Total Actives	Percent Change	Average Salary	Percent Change	Average Age	Average Service Credit
2008	31,158	41,928	73,086	1.4%	43,460	2.6%	47.0	9.8
2009	31,185	42,514	73,699	0.8	45,204	4.0	47.3	9.9
2010	30,935	42,061	72,996	(1.0)	45,988	1.7	47.4	10.1
2011	30,448	41,440	71,888	(1.5)	46,402	0.9	47.4	10.1
2012	30,198	40,858	71,056	(1.2)	47,167	1.6	47.1	9.8
2013	29,963	40,593	70,556	(0.7)	48,276	2.4	47.1	9.9
2014	29,423	40,013	69,436	(1.6)	48,893	1.3	47.1	9.8
2015	29,420	39,961	69,381	(0.1)	50,103	2.5	47.2	10.0
2016	28,041	38,204	66,245	(4.5)	51,115	2.0	47.3	10.2
2017	27,068	37,049	64,117	(3.2)	51,988	1.7	47.5	10.4

### Analysis of Change in Membership 10-Year Summary

Fiscal Year	Beginning Members	Additions	Retired	Died	Other Terminations	Ending Members
2008	72,092	10,548	1,903	88	7,563	73,086
2009	73,086	9,610	1,484	120	7,393	73,699
2010	73,699	8,341	1,761	115	7,168	72,996
2011	72,996	8,434	2,200	106	7,236	71,888
2012	71,888	9,739	2,553	110	7,908	71,056
2013	71,056	9,188	1,811	118	7,759	70,556
2014	70,556	8,962	2,098	91	7,893	69,436
2015	69,436	9,021	1,425	102	7,549	69,381
2016	69,381	7,443	2,135	92	8,352	66,245
2017	66,245	7,530	1,644	105	7,909	64,117

# Schedule of Retirees and Beneficiaries Added to and Removed from Rolls 10-Year Summary

	Beginning	Number		Number		End of	Annual	Average	% Increase
Fiscal	of Year	Added		Removed		Year	Pension Benefit	Annual	in Average
Year	Balance	to Rolls	Allowances	rom Rolls	Allowances	Balance	Amount	Benefit	Benefit
2008	43,395	3,498	-	1,547	-	45,346	\$1,254,030,795	\$ 27,655	3.9%
2009(A)	45,346	3,017	127,710,300	1,553	(30,203,460)	46,810	1,351,537,635	28,873	4.4
2010	46,810	3,599	139,122,054	1,506	(33,710,616)	48,903	1,454,470,195	29,742	3.0
2011	48,903	4,207	169,921,275	1,740	(40,835,477)	51,370	1,619,615,689	31,528	6.0
2012	51,370	4,782	191,103,116	1,620	(39,279,398)	54,532	1,771,439,407	32,484	3.0
2013	54,532	4,529	184,293,143	1,832	(46,183,430)	57,229	1,909,495,120	33,366	2.7
2014	57,229	4,073	166,748,080	1,896	(51,879,123)	59,406	1,984,416,426	33,404	0.1
2015	59,406	3,511	158,067,006	1,897	(53,610,853)	61,020	2,112,232,940	34,615	3.7
2016	61,020	4,058	175,156,703	1,932	(56,407,539)	63,146	2,218,653,518	35,135	5.3
2017	63,146	3,465	156,500,627	2,066	(62,821,394)	64,545	2,319,439,374	35,935	7.6

<sup>(</sup>A) FY 2009 is the first year in which the allowances related to retirees added to or removed from the rolls have been calculated as part of the actuarial valuation.

### TESTS OF FINANCIAL SOUNDNESS

The following four exhibits illustrate different measures of the financial soundness of the System. The Schedule of Funding compares State appropriations to the actuarial funding requirements, statutory funding requirement, and System expense.

# Schedule of Contributions from Employers and Non-Employer Contributing Entity: Fiscal Year 2008-2017 (\$ millions)

Fiscal	Gross ADC	Member Contribution	Net ADC	Employer Contribution	Non-Employer Entity Contribution	Employer/ Non-Employer Percentage
Year	(1) (A)	(2)	(3) (B)	(4) (C)	(5) (D)	Contributed (6) (E)
2008	\$ 971.6	\$ 264.1	\$ 707.5	\$ 38.0	\$ 306.9	48.7%
2009	1,147.3	273.3	874.0	34.3	417.3	51.7%
2010	1,278.3	275.0	1,003.3	34.2	662.4	69.4%
2011	1,519.2	260.2	1,259.0	36.5	737.1	61.4%
2012	1,701.6	258.2	1,443.3	45.6	940.2	68.3%
2013	1,794.4	245.1	1,549.3	41.9	1,359.6	90.5%
2014	1,843.6	283.1	1,560.5	43.9	1,459.0	96.3%
2015	1,890.3	267.7	1,622.6	39.9	1,488.6	94.2%
2016	2,090.0	278.9	1,811.1	39.3	1,542.9	87.4%
2017	2,143.4	278.6	1,864.8	38.4	1,612.2	88.5%

<sup>\*</sup>The fiscal year 2015 and 2016 amounts shown above have been corrected from the prior year reporting.

Schedule of Funding: Fiscal Year 2008-2017

- (A) Prior to 2014, The ADC (Actuarially Determined Contribution) was defined in GASB Statements 25 and 27 as the ARC (Annual Required Contribution).
- (B) The actuarially determined contribution per note A, less member contributions (2).
- (C) Contributions from SURS employers from trust and federal funds.
- (D) Contributions from The State of Illinois.
- (E) Employer and non-employer contributions divided by the Net ADC (Column 4 and 5 divided by Column 1).

The Funding Ratios exhibit shows the percentage of the System's accrued benefit cost covered by net position. This funding ratio is used to assess the System's ability to make future benefit payments. The exhibit illustrates the ratio of net position to the System's accrued benefit cost over 10 years, with net position valued both at cost and at market.

### Funding Ratios 10-Year Summary (\$ millions)

	Net Position	Net Position at Market/	Actuarial Funding	Fund	ding Ratio
Fiscal Year	at Cost	Actuarial Value of Assets (A)	Requirement	Cost	Market/Actuarial
2008	\$ 14,282.3	\$ 14,586.3	\$ 24,917.7	57.3%	58.5%
2009	12,485.0	14,282.0	26,316.2	47.4	54.3
2010	12,672.7	13,966.6	30,120.4	42.1	46.4
2011	13,302.2	13,945.7	31,514.3	42.2	44.3
2012	12,806.2	13,949.9	33,170.2	38.6	42.1
2013	13,347.7	14,262.6	34,373.1	38.8	41.5
2014	14,234.5	15,844.7	37,429.5	38.0	42.3
2015	14,930.0	17,104.6	39,520.7	37.8	43.3
2016	15,070.8	17,701.6	40,923.3	36.8	43.3
2017	15,579.0	18,594.3	41,853.3	37.2	44.4

(A) Per Public Act 96-0043, the actuarial value of assets is used in determining the funding progress of the System and in establishing the employer contribution rates necessary to adhere to the statutory funding plan. The actuarial value of assets is based on a smoothed investment income rate. Investment income in excess or shortfall of the expected 7.25% rate on fair value is smoothed over a five-year period with 20% of a year's excess or shortfall being recognized each year beginning with the current year.

### TESTS OF FINANCIAL SOUNDNESS

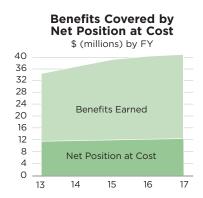
The Percentage of Benefits Covered by Net Position exhibit compares the plan's net position with the members' accumulated contributions, the amount necessary to cover the present value of benefits currently being paid, and the employer's portion of future benefits for active members.

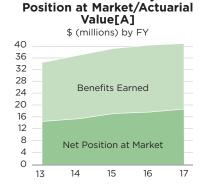
# Percentage of Benefits Covered by Net Position 10-Year Summary (\$ millions)

Fiscal	Member Accumulated Contributions	Members Currently Receiving Benefits	Active/Inactive Members/ Employers' Portion	Net Position/ Actuarial Value of		Benefits Covered by Net ion/Actuarial Value of Assets		
Year	{1}(A)	{2}(A)	{3}(A)	Assets (B)	{1}	{2}	{3}	
2008	\$ 5,426.8	\$ 13,978.1	\$ 5,512.8	\$ 14,586.3	100.0%	65.5%	_	
2009	5,688.9	14,802.6	5,824.7	14,282.0	100.0	58.1	-	
2010	5,916.3	16,834.4	7,369.7	13,966.6	100.0	47.8	-	
2011	6,007.4	18,918.1	6,588.8	13,945.7	100.0	42.0	-	
2012	5,962.4	20,651.4	6,556.4	13,949.9	100.0	38.7	-	
2013	5,830.1	22,099.9	6,443.1	14,262.6	100.0	38.2	-	
2014	6,094.9	24,388.6	6,946.0	15,844.7	100.0	40.0	-	
2015	6,196.6	26,042.4	7,281.7	17,104.6	100.0	41.9	-	
2016	6,145.8	27,342.2	7,435.3	17,701.6	100.0	42.3	-	
2017	6,348.8	28,226.0	7,278.6	18,594.3	100.0	43.4 (C)	-	

- (A) A test of financial soundness of the System is its ability to pay all promised benefits when due. The columns are in the order that assets would be used to cover certain types of obligations. Column 1 represents the value of members' accumulated contributions, which would be refunded first. Column 2 represents the amounts necessary to pay participants currently receiving benefits, which would be covered next. Column 3 represents the employer's portion of future benefits for active members, which would be covered last. If a System is receiving the actuarially determined contribution amounts, the total of the actuarial values in Columns 1 and 2 should generally be fully covered by assets, and the portion of the actuarial values of Column 3 covered by assets should increase over time.
- (B) Per Public Act 96-0043, the actuarial value of assets is used in determining the funding progress of the System and in establishing the employer contribution rates necessary to adhere to the statutory funding plan. The actuarial value of assets is based on a smoothed investment income rate. Investment income in excess or shortfall of the expected 7.25% rate on fair value is smoothed over a five-year period with 20% of a year's excess or shortfall being recognized each year beginning with the current year.
- (C) Per Public Act 96-0043, beginning fiscal year 2009, measures of financial soundness will be calculated using an actuarial value of assets based on a smoothed investment income rate. If the market value of net position is used for fiscal year 2017, the percentage of benefits covered by net position would decrease to 42.9%.

**Benefits Covered by Net** 







### TESTS OF FINANCIAL SOUNDNESS

The final test, Payroll Percentages, compares member payroll to unfunded accrued benefit cost, normal cost, and total required contributions.

### Payroll Percentages: Fiscal Year 2008-2017 (\$ millions)

			d Accrued it Cost		Employer Cost					oloyer ibutions
					Д	mortization				
Fiscal	Member		% of	Normal	% of 0	of Unfunded		% of	Emp	% of
Year	Payroll	Amount	Payroll	Cost (A)	Payroll	Liability	Total	Payroll	Cont.	Payroll
2008	\$ 3,303.2	\$10,331.4	312.8%	\$ 310.4	9.1%	\$ 671.9	\$ 971.6	29.4%	\$ 344.9	10.4%
2009	3,463.9	12,034.2	347.4	317.9	9.2	829.4	1,147.3	33.1	451.6	13.0
2010	3,491.1	16,153.8	462.7	355.4	10.2	922.9	1,278.3	36.6	696.6	20.0
2011	3,460.8	17,568.6	507.6	463.6	13.4	1,055.6	1,519.2	43.9	773.6	22.4
2012	3,477.2	19,220.3	552.8	465.6	13.4	1,236.0	1,701.6	48.9	985.8	28.4
2013	3,533.9	20,110.5	569.1	454.6	12.9	1,339.9	1,794.4	50.8	1,401.5	39.7
2014	3,522.2	21,584.8	612.8	415.1	11.8	1,428.5	1,843.6	52.3	1,502.9	42.7
2015	3,606.5	22,416.1	621.5	462.3	12.8	1,396.2	1,858.5	51.6	1,528.5	42.4
2016	3,513.1	23,221.7	661.0	460.7	13.1	1,466.8	1,927.5	54.9	1,582.3	45.0
2017	3,458.3	23,259.0	672.6	423.2	12.2	1,720.3	2,143.4	62.0	1,650.6	47.7

<sup>(</sup>A) Actuarially determined normal cost less member contributions.

### **CHANGES IN PLAN PROVISIONS**

There were no changes in the SURS benefit plan provisions in fiscal year 2017. The plan summary can be found in the Notes to the Financial Statements.



# STATISTICAL

- INTRODUCTION TO STATISTICAL SECTION
- ☐ FINANCIAL SCHEDULES
- ☐ STATISTICAL ANALYSIS
- BENEFIT SUMMARY
- PARTICIPATING EMPLOYERS

The Comprehensive Annual Financial Report for Fiscal Year Ended June 30, 2017

### INTRODUCTION TO STATISTICAL SECTION

The tables in this section present detailed information on benefit payments and recipients, member and employer contributions, financial trends and the largest SURS employers.

### **Section Contents**

### Financial Schedules - pages 95-97

These schedules present historical financial information designed to provide information on the System's progress in accumulating assets to pay benefits when due.

#### Statistical Analysis - page 98

These schedules present summaries of benefit recipients and number of System employees over a 10-year period.

#### Benefit Summary - pages 99-102

These schedules present information on new benefit payments by type, average benefit payments by years credited service, number of benefit recipients by type, and number of covered employees by employer.

### Participating Employers - page 103

### FINANCIAL SCHEDULES

# Changes in Plan Net Position - Defined Benefit Plan 10-Year Summary (\$ millions)

The historical trend information presented below is designed to provide information on the System's progress in accumulating assets to pay benefits when due.

#### Additions

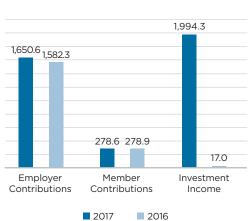
Fiscal	Member	Investment	Employ	er Contributions		
Year	Contributions	Income (Loss)	Amount	% of Payroll	Total	
2008	\$ 264.1	\$ (675.7)	\$ 345.0	10.4%	\$ (66.6)	
2009	273.3	(2,859.5)	451.6	13.0%	(2,134.6)	
2010	275.0	1,653.8	696.6	19.9%	2,625.4	
2011	260.2	2,801.1	773.6	22.4%	3,834.9	
2012	258.2	9.1	985.8	28.4%	1,253.1	
2013	245.1	1,694.8	1,401.5	39.7%	3,341.4	
2014	283.1	2,667.9	1,502.8	42.7%	4,453.8	
2015	267.7	503.2	1,528.5	42.4%	2,299.4	
2016	278.9	17.0	1,582.3	45.0%	1,878.2	
2017	278.6	1,994.3	1,650.6	47.7%	3,923.5	

#### **Deductions (A)**

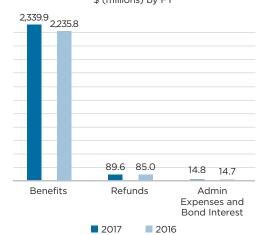
Fiscal Year	Benefits	Contribution Refunds	Administrative Expenses and Bond Interest	Total	Changes in Plan Net Position
2008	\$ 1,267.4	\$ 53.3	\$ 12.1	\$ 1,332.8	\$ (1,399.4)
2009	1,362.7	51.9	12.9	1,427.5	(3,562.1)
2010	1,468.8	56.0	12.1	1,536.9	1,088.6
2011	1,598.6	71.5	12.3	1,682.4	2,152.5
2012	1,735.3	73.5	13.2	1,822.0	(568.9)
2013	1,914.5	81.5	13.4	2,009.4	1,332.0
2014	2,002.9	82.9	13.8	2,099.6	2,354.2
2015	2,130.0	83.7	14.1	2,227.8	71.6
2016	2,235.8	85.0	14.7	2,335.5	(457.3)
2017	2,339.9	89.6	14.8	2,444.3	1,479.2

(A) Breakdown of deductions into benefit and refund types has been revised for the 10-year period according to Governmental Accounting Standards Board Statement No. 44 and Governmental Accounting, Auditing and Financial Reporting guidelines.

# Additions \$ (millions) by FY



# **Deductions** \$ (millions) by FY



### FINANCIAL SCHEDULES

# Schedule of Benefit and Refund Deductions - Defined Benefit Plan 10-Year Summary (\$ millions)

### **Benefit Deductions by Type (A)**

Fiscal	Retirement			Р	ortable Refund	
Year	& DRA	Survivor	Disabilty	Death	(ER match)	Total
2008	\$ 1,159.5	\$ 81.8	\$ 16.8	\$ 2.2	\$ 7.1	\$ 1,267.4
2009	1,249.7	87.6	16.8	2.5	6.1	1,362.7
2010	1,349.9	94.3	16.1	1.6	6.9	1,468.8
2011	1,468.1	101.1	16.4	2.2	10.8	1,598.6
2012	1,597.5	109.0	15.9	1.7	11.2	1,735.3
2013	1,767.8	116.9	15.9	2.4	11.5	1,914.5
2014	1,843.0	125.4	16.1	2.2	16.2	2,002.9
2015	1,962.4	133.8	16.0	4.9	12.9	2,130.0
2016	2,059.8	142.5	16.4	4.0	13.1	2,235.8
2017	2,152.5	149.9	17.0	6.6	13.9	2,339.9

### Refund Deductions by Type (A)

Fiscal		Survivor Ins	Death	Portable Lump	
Year	Withdrawals	Refunds	Benefits	Sum Retirement	Total
2008	\$ 29.0	\$ 8.9	\$ 11.3	\$ 4.1	\$ 53.3
2009	27.8	8.7	12.8	2.6	51.9
2010	31.5	8.9	9.9	5.7	56.0
2011	38.8	9.3	14.5	8.9	71.5
2012	42.4	11.5	9.8	9.8	73.5
2013	43.4	11.8	15.8	10.5	81.5
2014	50.4	5.4	12.5	14.6	82.9
2015	46.2	10.5	13.5	13.5	83.7
2016	44.5	10.5	15.9	14.1	85.0
2017	50.5	7.6	18.8	12.7	89.6

<sup>(</sup>A) Breakdown of deductions into benefit and refund types has been revised for the 10-year period according to Governmental Accounting Standards Board Statement No. 44 and Governmental Accounting, Auditing and Financial Reporting guidelines.

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### FINANCIAL SCHEDULES

# Changes in Plan Net Position - Defined Contribution Plan 10-Year Summary (\$ millions)

The historical trend information presented below is designed to provide information on the System's progress in accumulating assets to pay benefits when due.

#### **Additions**

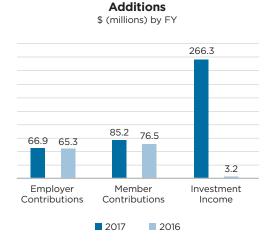
Fiscal	Member	Investment	Emplo	yer Contributions	
Year	Contributions	Income (Loss)	Amount	% of Payroll	Total
2008	\$ 46.0	\$ (39.1)	\$ 38.9	7.6	\$ 45.8
2009	48.8	(116.4)	38.3	7.6	(29.3)
2010	48.6	71.5	43.1	7.6	163.2
2011	49.8	172.5	44.8	7.6	267.1
2012	54.1	16.7	45.9	7.6	116.7
2013	59.9	147.5	49.2	7.6	256.6
2014	65.5	246.3	57.2	7.6	369.0
2015	72.3	90.5	62.3	7.6	225.1
2016	76.5	3.2	65.3	7.6	145.0
2017	85.2	266.3	66.9	7.6	418.4

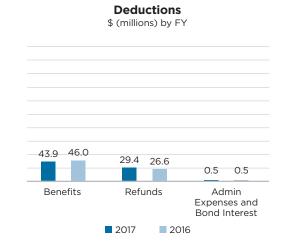
#### **Deductions (A)**

Fiscal Year	Benefits	Contribution Refunds	Administrative Expenses and Bond Interest (B)	Total	Changes in Plan Net Position
2008	\$ 2.9	\$ 10.5	\$ -	\$ 13.4	\$ 32.4
2009	4.1	9.4	-	13.5	(42.8)
2010	6.0	10.5	0.3	16.8	146.4
2011	10.0	16.2	0.3	26.5	240.6
2012	13.3	20.7	0.4	34.4	82.3
2013	19.6	20.1	0.4	40.1	216.5
2014	18.4	24.8	0.4	43.6	325.4
2015	30.9	24.9	0.5	56.3	168.9
2016	46.0	26.6	0.5	73.1	72.0
2017	43.9	29.4	0.5	73.7	344.7

(A) Breakdown of deductions into benefit and refund types has been revised for the 10-year period according to Governmental Accounting Standards Board Statement No. 44 and Governmental Accounting, Auditing and Financial Reporting guidelines.

(B) Until FY 2010, SMP administrative expenses were included with the Defined Benefit Plan totals.





# STATISTICAL ANALYSIS

# Schedule of Benefit Recipients - Defined Benefit Plan 10-Year Summary

					Disability
Fiscal			Contribution		Retirement
Year	Survivor	Disability	Refunds	Retirement	Allowance
2008	7,122	762	3,975	37,055	407
2009	7,269	726	4,635	38,400	415
2010	7,402	728	4,312	40,364	409
2011	7,578	709	4,489	42,682	401
2012	7,870	715	4,618	45,548	399
2013	8,001	688	4,528	48,142	398
2014	8,144	634	4,734	50,237	391
2015	8,342	656	4,144	51,631	391
2016	8,481	671	4,376	53,596	398
2017	8,614	643	4,433	54,902	386

# Number of SURS Employees (full-time equivalents) 10-Year Summary

Fiscal	HR &	Inv &	Member Svcs &	IS & Support		
Year	Admin	Acctg	Outreach	Svcs	SMP	Total
2008	10.55	10.05	61.50	33.75	3.25	119.10
2009	9.55	11.30	59.50	29.75	4.00	114.10
2010	10.55	11.80	62.50	29.75	3.70	118.30
2011	10.55	12.80	62.00	29.75	3.70	118.80
2012	9.90	9.65	65.80	28.75	3.70	117.80
2013	10.90	10.65	69.00	26.75	3.70	121.00
2014	12.00	10.55	67.00	26.25	4.20	120.00
2015	13.00	11.55	72.00	24.25	4.20	125.00
2016	14.00	11.55	73.00	22.25	4.20	125.00
2017	14.00	13.55	73.00	22.25	4.20	127.00

### Schedule of New Benefit Payments - Defined Benefit Plan July 1, 2016 through June 30, 2017

	Retir	ement	Disa	ability	Su	ırvivors
Age	Number	Average Monthly Benefit (A)	Number	Average Monthly Benefit (A)	Number	Average Monthly Benefit (A)
Under 10	_	\$ -	_	\$ -	6	\$ 675
10-14	_	_	_	_	8	628
15-19	_	_	_	_	16	641
20-24	_	_	_	-	3	800
25-29	_	-	2	1,180	1	846
30-34	_	-	3	2,794	1	26
35-39	_	-	7	1,551	2	701
40-44	_	-	11	1,766	3	2,279
45-49	12	3,271	15	2,046	8	311
50-54	95	3,592	31	2,363	25	1,099
55-59	681	2,502	28	1,858	23	1,124
60-64	911	2,164	24	2,592	38	1,619
65-69	654	2,062	10	1,646	75	2,106
70-74	229	1,640	4	3,404	120	2,202
75-79	54	1,958	2	4,332	123	1,726
80-84	17	1,911	-	-	112	1,624
85-89	6	4,636	-	-	66	1,960
90-94	1	7,493	-	-	35	1,649
95-99	-	-	-	-	3	2,550
Over 99	-	-	-	-	-	-
Total	2,660	\$ 2,238	137	\$ 2,175	668	\$ 1,735

Average Age - Retirement 62.9 Years Average Age - Disabilitant 54.0 Years Average Age - Survivors 71.3 Years

<sup>(</sup>A) Total average monthly benefit is calculated based on a weighted average

# Schedule of Average Benefit Payments - Defined Benefit Plan For Retirees as of June 30

` /	_	C 1:: 1	· ·
Years	$\cap$ T	Credited	Service

			rears 0	i Credited Se	rivice		
	0-10	11-15	16-20	21-25	26-29	30+	Total
Fiscal Year 2008  Number of Retirees  Avg Monthly Annuity  Final Average Salary	9,253 \$ 790 \$ 32,978	5,212 1,245 37,044	5,153 2,067 45,569	5,754 3,178 54,420	6,399 4,296 63,061	5,284 5,473 72,333	37,055 2,676 49,941
Avg Credited Service							19.92
Fiscal Year 2009  Number of Retirees  Avg Monthly Annuity  Final Average Salary  Avg Credited Service	9,477 \$ 755 \$ 33,742	5,462 1,306 37,858	5,351 2,172 46,698	6,084 3,301 55,438	5,230 4,329 62,919	6,796 5,496 72,174	38,400 2,760 50,670 19.78
Fiscal Year 2010 Number of Retirees Avg Monthly Annuity Final Average Salary Avg Credited Service	10,206 \$ 785 \$ 34,171	5,722 1,363 38,081	5,642 2,269 47,723	6,433 3,423 55,824	5,502 4,471 63,496	6,859 5,684 72,247	40,364 2,830 50,811 19.62
Fiscal Year 2011  Number of Retirees  Avg Monthly Annuity  Final Average Salary  Avg Credited Service	11,081 \$ 866 \$ 34,140	5,979 1,423 37,607	6,019 2,373 46,721	6,821 3,541 55,154	5,838 4,628 63,436	6,944 5,874 70,158	42,682 2,913 50,029 19.47
Fiscal Year 2012  Number of Retirees  Avg Monthly Annuity  Final Average Salary  Avg Credited Service	11,989 \$ 897 \$ 35,381	6,453 1,493 38,835	6,437 2,472 48,172	7,377 3,680 56,995	6,218 4,785 65,027	7,074 6,076 71,922	45,548 2,990 51,306 19.31
Fiscal Year 2013  Number of Retirees  Avg Monthly Annuity  Final Average Salary  Avg Credited Service	12,053 \$ 729 \$ 36,402	6,970 1,553 40,045	6,949 2,565 49,467	8,136 3,807 58,882	6,796 4,914 66,942	7,238 6,248 73,074	48,142 3,054 52,500 19.11
Fiscal Year 2014 Number of Retirees Average Monthly Annuity Final Average Salary Average Service Credit	12,819 \$ 752 \$ 37,418	7,316 1,597 40,779	7,197 2,623 50,254	8,453 3,895 59,673	7,117 5,026 67,783	7,335 6,415 74,267	50,237 3,104 53,111 18.99
Fiscal Year 2015 Number of Retirees Avg Monthly Annuity Final Average Salary Avg Credited Service	13,435 \$ 781 \$ 38,416	7,512 1,648 41,594	7,416 2,706 51,412	8,727 4,021 60,959	7,264 5,183 68,769	7,277 6,611 75,265	51,631 3,172 54,050 18.83
Fiscal Year 2016  Number of Retirees  Avg Monthly Annuity  Final Average Salary  Avg Credited Service	14,202 \$ 804 \$ 39,417	7,840 1,683 42,181	7,652 2,774 52,377	9,011 4,124 62,193	7,561 5,307 69,922	7,330 6,791 76,675	53,596 3,226 54,949 18.70

### Schedule of Average Benefit Payments - Defined Benefit Plan For Retirees as of June 30

V0000	of Credited Service	

		0-10	11-15	16-20	21-25	26-29	30+	Total
Fiscal Year 2017								
Number of Retirees	14	1,735	8,096	7,884	9,136	7,684	7,367	54,902
Avg Monthly Annuity	\$	823	1,726	2,823	4,224	5,431	6,960	3,278
Final Average Salary	\$ 40	),284	42,992	53,160	63,026	70,795	78,065	55,679
Avg Credited Service								18.58

### Number of Covered Employees by Employer - Defined Benefit Plan

		2017	2016		
Participating Employer	Covered Employees	% of Total SURS Membership	Covered Employees	% of Total SURS Membership	
University of Illinois - Chicago	11,446	17.9%	11,421	17.2%	
University of Illinois - Urbana	9,522	14.9	9,723	14.7	
City Colleges of Chicago	4,447	6.9	4,878	7.4	
Southern Illinois University - Carbondale	3,752	5.9	3,929	5.9	
Illinois State University	2,655	4.1	2,693	4.1	
Northern Illinois University	2,577	4.0	2,657	4.0	
College of DuPage	2,263	3.5	2,319	3.5	
Southern Illinois University - Edwardsville	2,063	3.2	2,005	3.0	
College of Lake County	1,338	2.1	N/A*	N/A*	
Western Illinois University	1,364	2.1	1,364	2.1	
Triton College	N/A**	N/A**	1,261	1.9	
Total, largest 10 employers	41,427	64.6	42,250	63.8	
All other employers	22,722	35.4	23,995	36.2	
Grand total	64,149	100.0	66,245	100.0	

### Number of Covered Employees by Employer - Defined Contribution Plan

		2017	2016		
Participating Employer	Covered % of Total SURS Employees Membership		Covered Employees	% of Total SURS Membership	
University of Illinois - Urbana	2,687	22.2%	2,671	22.5%	
University of Illinois - Chicago	2,329	19.2	2,223	18.7	
Southern Illinois University - Carbondale	800	6.6	813	6.8	
Northern Illinois University	635	5.2	648	5.5	
Illinois State University	605	5.0	615	5.2	
Southern Illinois University - Edwardsville	430	3.6	415	3.5	
City Colleges of Chicago	346	2.9	378	3.2	
College of DuPage	319	2.6	338	2.8	
William Rainey Harper College	286	2.4	N/A*	N/A*	
Western Illinois University	284	2.3	299	2.5	
Triton College	N/A**	N/A**	96	0.8	
Total, largest 10 employers	8,721	72.0	8,496	71.5	
All other employers	3,384	28.0	3,384	28.5	
Grand total	12,105	100.0	11,880	100.0	

 $<sup>^{\</sup>ast}$  In FY 2016, this entity did not rank in the Top Ten.  $^{\ast\ast}$  In FY 2017, this entity did not rank in the Top Ten.

<sup>\*</sup> In FY 2016, this entity did not rank in the Top Ten.
\*\* In FY 2017, this entity did not rank in the Top Ten.

# Schedule of Benefit Recipients by Type of Benefit - Defined Benefit Plan For the Year Ended June 30, 2017

Monthly								
Amount of	Total	General	Money	Police	Other	Long-Term	Temporary	
Benefit	Recipients	Formula	Purchase	or Fire	(A)	Disability	Disability	Survivor
<b>40 500</b>	10.707	4.004	4.700		477	10	11	0.150
\$0 - 500	10,723	4,024	4,382	-	137	19	11	2,150
501 - 1000	8,471	2,743	3,381	-	28	177	35	2,107
1,001 - 1,500	6,242	1,953	3,056	-	1	120	103	1,009
1,501 - 2,000	5,553	1,552	2,884	-	-	27	233	857
2,001 - 2,500	4,756	1,189	2,766	1	-	19	110	671
2,501 - 3,000	4,247	976	2,691	2	-	13	56	509
3,001 - 3,500	3,748	894	2,376	10	-	3	30	435
3,501 - 4,000	3,078	790	1,940	14	2	7	23	302
4,001 - 4,500	2,490	723	1,527	18	1	-	17	204
4,501 - 5,000	2,165	733	1,266	20	-	-	10	136
5,001 - 5,500	1,898	646	1,145	21	-	-	4	82
5,501 - 6,000	1,665	586	1,016	13	-	-	2	48
6,001 - 7,000	2,753	1,010	1,659	29	-	-	5	50
7,001 - 8,000	2,130	821	1,269	11	-	-	1	28
8,001 - 9,000	1,522	622	877	7	-	-	1	15
9,001 - 10,000	1,061	497	556	2	-	-	-	6
10,001 - 11,000	727	343	380	-	-	-	1	3
11,001 - 12,000	3 485	246	236	1	-	1	1	-
12,001 - 13,000	267	130	137	-	-	-	-	-
13,001 - 14,000	170	93	77	-	-	-	-	-
14,001 - 15,000	113	66	47	-	-	-	-	-
15,001 - 16,000	74	38	35	-	-	-	-	1
Over 16,000	207	128	77	1	-	-	-	1
Total	64,545	20,803	33,780	150	169	386	643	8,614

<sup>(</sup>A) Minimum annuity and retirements of participants who terminated prior to 1969.

### PARTICIPATING EMPLOYERS

Black Hawk College
Carl Sandburg College
Chicago State University
City Colleges of Chicago
College of DuPage
College of Lake County

Danville Area Community College

Eastern Illinois University
Elgin Community College
Governors State University
Heartland Community College
Highland Community College
ILCS Section 15-107(I) Members
ILCS Section 15-107(c) Members
Illinois Board of Examiners

Illinois Board of Higher Education

Illinois Central College

Illinois Department of Innovation and Technology

Illinois Community College Board

Illinois Community College Trustees Association

Illinois Eastern Community College

Illinois Mathematics and Science Academy

Illinois State University

Illinois Valley Community College

John A. Logan College

John Wood Community College

Joliet Junior College

Kankakee Community College

Kaskaskia College Kishwaukee College Lake Land College

Lewis & Clark Community College

Lincoln Land Community College

McHenry College

Moraine Valley Community College

Morton College

Northeastern Illinois University Northern Illinois University

Northern Illinois University Foundation

Oakton Community College

Parkland College Prairie State College Rend Lake College

Richland Community College

Rock Valley College Sauk Valley College Shawnee College

Southern Illinois University - Carbondale Southern Illinois University - Edwardsville

South Suburban College Southeastern Illinois College Southwestern Illinois College

Spoon River College

State Universities Civil Service System State Universities Retirement System

Triton College

University of Illinois — Alumni Association

University of Illinois — Foundation
University of Illinois — Chicago
University of Illinois — Springfield
University of Illinois — Urbana
Waubonsee Community College
Western Illinois University
William Rainey Harper College



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