

**Teachers' Retirement System  
of the State of Illinois  
(A Component Unit of the State of Illinois)**

Financial Report  
For the Year Ended June 30, 2015

Performed as Special Assistant Auditors  
for the Auditor General, State of Illinois



**Teachers' Retirement System  
of the State of Illinois**

**Financial Audit**

**For the Year Ended June 30, 2015**

**Contents**

Financial Statement Report	
System Officials and Office Locations	1
Summary	1
Independent Auditor's Report	2
Management's Discussion and Analysis	4
Statement of Fiduciary Net Position	9
Statement of Changes in Fiduciary Net Position	10
Notes to Financial Statements	11
 Required Supplementary Information	
Schedule of Changes in the Net Pension Liability	35
Schedule of the Net Pension Liability	35
Schedule of Investment Returns	35
Schedule of Contributions from Employers and Other Contributing Entities	36
Notes to Required Supplementary Information	36
 Other Supplementary Information	
Schedule of Administrative Expenses	37
Schedule of Investment Expenses	38
Schedule of Professional Services	39
 Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with <i>Government Auditing Standards</i>	40
 Schedule of Findings	42

**Teachers' Retirement System  
of the State of Illinois**

**Financial Statement Report  
June 30, 2015**

---

**System Officials**

Executive Director  
Chief Investment Officer  
Chief Financial Officer  
General Counsel  
Director of Internal Audit

Richard W. Ingram  
Stan Rupnik, CFA  
Jana Bergschneider, CPA  
Thomas Gray  
Stacy Smith, CPA

**Office Locations**

Springfield Office  
2815 West Washington Street  
Springfield, Illinois 62794

Lisle Office  
4200 Commerce Court, Suite 100  
Lisle, Illinois 60532-3611

**Summary**

The audit of the accompanying financial statements of the Teachers' Retirement System of the State of Illinois (System) was performed by RSM US LLP.

Based on their audit, the auditors expressed an unmodified opinion on the System's financial statements.

**Summary of Findings**

The auditors identified a matter involving the System's internal control over financial reporting that they considered to be a significant deficiency. The significant deficiency is described in the accompanying Schedule of Findings on pages 42-43 of this report as item 2015-001 (Controls over Census Data).

**Exit Conference**

In correspondence received from the Teachers' Retirement System of the State of Illinois on December 2, 2015, the System elected to waive a formal exit conference. The response to the recommendation was provided by Jana Bergschneider, Chief Financial Officer, in correspondence dated December 9, 2015.

## Independent Auditor's Report

RSM US LLP

Honorable William G. Holland, Auditor General – State of Illinois

Board of Trustees, Teachers' Retirement System of the State of Illinois

### Report on the Financial Statements

As Special Assistant Auditors for the Auditor General, we have audited the accompanying Statement of Net Position of the Teachers' 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, 2015, and the related Statement of Changes in Net Position for the year then ended, and the related notes to the financial statements, which collectively comprise the 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 and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. 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 entity'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 entity'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 net position of the Teachers' Retirement System of Illinois as of June 30, 2015, and the changes in net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

#### ***Emphasis of Matter***

The actuarially determined pension liability, calculated as required by GASB Statement 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 A, Section 6 of the financial statements on page 13. Our opinion is not modified with respect to this matter.

## **Other Matters**

### *Required Supplementary Information:*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 4 through 8 and the schedule of changes in the net pension liability, the schedule of the net pension liability, the schedule of investment returns and the schedule of contributions from employers and other contributing entities on pages 35 and 36 be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the 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 financial statements, and other knowledge we obtained during our audit of the 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, 2015 was conducted for the purpose of forming an opinion on the System's financial statements. The other supplementary information as listed in the table of contents is presented for purposes of additional analysis and are not a required part of the financial statements.

The other supplementary information for the year ended June 30, 2015 is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The other supplementary information has been subjected to the auditing procedures applied in the audit of the financial statements for the year ended June 30, 2015 and certain additional procedures, including comparing and reconciling such information directly to underlying accounting and other records used to prepare the financial statements, or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplementary information is fairly stated in all material respects, in relation to the financial statements as a whole for the year ended June 30, 2015.

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, 2014 (not presented herein), and have issued our report thereon dated January 6, 2015, which contained an unmodified opinion on those financial statements. The accompanying other supplementary information which consists of supporting schedules for the year ended June 30, 2014 is presented for purposes of additional analysis and is not a required part of the 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 2014 financial statements. The other supplementary information has been subjected to the auditing procedures applied in the audit of the 2014 financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare those financial statements or to those financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplementary information is fairly stated, in all material respects, in relation to the financial statements as a whole for the year ended June 30, 2014.

## **Other Reporting Required by Government Auditing Standards**

In accordance with *Government Auditing Standards*, we have also issued our report dated December 17, 2015 on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and its compliance.

RSM US LLP

Schaumburg, Illinois  
December 17, 2015

## MANAGEMENT’S DISCUSSION AND ANALYSIS

This discussion and analysis of the Teachers’ Retirement System of the State of Illinois provides an overview of financial activities for the fiscal year ended June 30, 2015. Please read it in conjunction with the Financial Statements and related notes that follow this discussion.

### FINANCIAL HIGHLIGHTS

- The net position of TRS at June 30, 2015 was \$46.4 billion.
- During FY15, the net position of TRS increased \$583 million.
- Contributions from members, employers, and the State were \$4.5 billion, a decrease of \$67 million or 1.5 percent for FY15.
- Total net investment income was \$1.8 billion, compared to \$6.8 billion in FY14, a decrease of \$5.0 billion.
- Benefits and refunds paid to members and annuitants were \$5.6 billion, an increase of \$304 million or 5.7 percent.
- The total actuarial accrued liability was \$108.1 billion at June 30, 2015.
- The unfunded actuarial accrued liability was \$62.7 billion at June 30, 2015. The funded ratio was 42.0 percent at June 30, 2015. The unfunded liability and funded ratio are calculated using a smoothed value of assets, as required under Public Act 96-0043.
- The total pension liability was \$111.9 billion at June 30, 2015.
- The net pension liability was \$65.5 billion at June 30, 2015. The Plan Fiduciary Net Position, as a percentage of total pension liability, was 41.5 percent.

The Financial Statements consist of:

**Statement of Fiduciary Net Position.** This statement reports the pension trust fund’s net position which represents the difference between the other statement elements comprised of assets and liabilities. It is the balance sheet for the pension system and reflects the financial position of the Teachers’ Retirement System as of June 30, 2015.

**Statement of Changes in Fiduciary Net Position.** This statement details transactions that occurred during the fiscal year. It is the income statement of TRS and reflects the revenues and expenses recorded throughout the fiscal year. This statement supports the change in the value of net position reported on the Statement of Fiduciary Net Position.

**Notes to the Financial Statements.** The notes are an integral part of the financial statements and include additional information not readily evident in the statements themselves.

**Required Supplementary Information and Other Supplementary Information.** The required supplementary information and other financial information following the notes to the financial statements provide historical and additional detailed information considered useful in evaluating the pension system’s financial condition.

The following are condensed comparative financial statements of the TRS pension trust fund.

**Condensed Comparative Statements  
of Fiduciary Net Position  
as of June 30**

	2015	Percentage Change	2014
Cash	\$45,709,535	(24.9%)	\$60,859,067
Receivables and prepaid expenses	5,747,410,436	5.8	5,430,213,496
Investments	46,099,664,885	1.5	45,435,578,617
Invested securities lending collateral	2,943,517,231	5.2	2,798,549,336
Capital assets	3,947,730	(4.0)	4,114,038
<b>Total assets</b>	<b>54,840,249,817</b>	<b>2.1</b>	<b>53,729,314,554</b>
<b>Total liabilities</b>	<b>8,433,334,224</b>	<b>6.7</b>	<b>7,904,932,040</b>
<b>Net position restricted for pensions</b>	<b><u>\$ 46,406,915,593</u></b>	<b>1.3%</b>	<b><u>\$45,824,382,514</u></b>

**Condensed Comparative Statements of Changes  
in Fiduciary Net Position  
for the Years Ended June 30**

	2015	Percentage Change	2014
Contributions	\$4,458,707,579	(1.5%)	\$4,525,463,343
Net investment income	1,770,549,533	(73.9)	6,782,031,720
Total additions	6,229,257,112	(44.9)	11,307,495,063
Benefits and refunds	5,625,037,173	5.7	5,320,662,979
Administrative expenses	21,686,860	2.2	21,218,069
Total deductions	5,646,724,033	5.7	5,341,881,048
<b>Net increase in net position</b>	<b>582,533,079</b>		<b>5,965,614,015</b>
<b>Net position restricted for pensions - beginning of year</b>	<b><u>45,824,382,514</u></b>	<b>15.0</b>	<b><u>39,858,768,499</u></b>
<b>Net position restricted for pensions - end of year</b>	<b><u>\$46,406,915,593</u></b>	<b>1.3%</b>	<b><u>\$45,824,382,514</u></b>

## FINANCIAL ANALYSIS

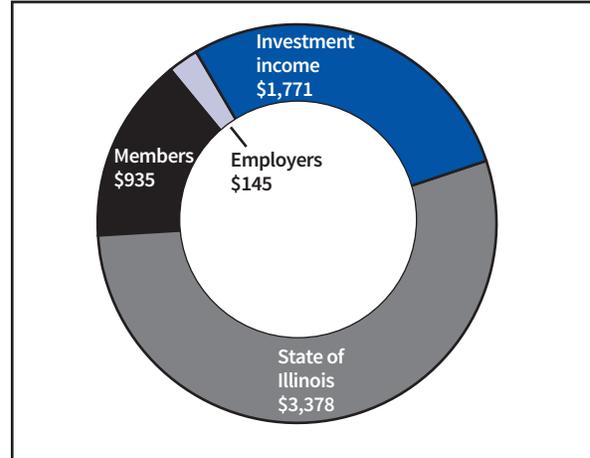
TRS was created to provide retirement, survivor, and disability benefits to qualified members. Increases or decreases in the plan's net position serve as useful indicators of TRS's financial position. The net position available to pay benefits was \$46.4 billion at June 30, 2015.

## CONTRIBUTIONS

Contributions decreased \$67 million during FY15. During FY15, member contributions increased \$6.7 million and employer contributions from school districts decreased \$12.7 million. The net decrease in employer contributions from school districts in FY15 is attributable to a decrease in federal funds contributions and employer early retirement option contributions.

The State of Illinois makes appropriations to TRS. Receipts from the State of Illinois decreased \$61 million in FY15. The decrease in FY15 was mainly due to the phased-in recognition of FY10, FY11 and FY13 actuarial gains on investments. Gains during those years are being recognized over five-year periods and more than offset the FY12 returns that were lower than expected. The certified amount was further reduced under the provisions of Public Act 98-0674 which increased districts' contributions from federal funds. The act required TRS to reduce its appropriation request from the state comptroller by the estimated increase in federal funds, resulting in a decrease in FY15 state contributions of an additional \$35 million. State funding law provides for a 50-year funding plan that included a 15-year phase-in period and a goal of 90 percent funding in the year 2045.

Revenues by Type  
for the Year Ended June 30, 2015  
(\$ millions)

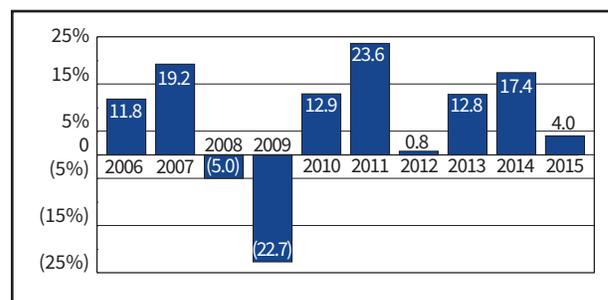


## INVESTMENTS

The TRS trust fund is invested according to law under the "prudent person rule" requiring investments to be managed solely in the interest of fund participants and beneficiaries. Principles guiding the investment of funds include preserving the long-term principal of the trust fund and maximizing total return within prudent risk parameters.

The TRS investment portfolio returned 4.0 percent, net of fees, for the fiscal year ended June 30, 2015. Total TRS investment assets increased approximately \$664 million during the year.

Annual Rate of Return  
(net of investment expenses)



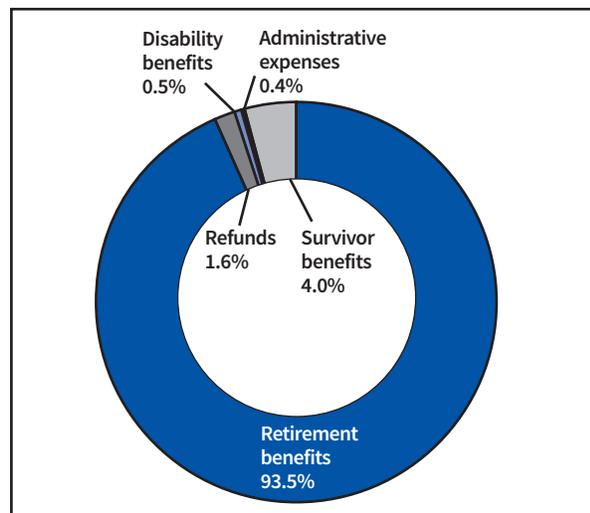
## BENEFITS AND REFUNDS

Retirement, survivor, and disability benefit payments increased \$311 million during FY15. Benefit payments increased to \$5.5 billion with 114,922 recipients in FY15. The overall increase in benefit payments for FY15 is due to an increase in retirement benefits and the number of retirees.

Retirement benefits were higher as a result of annual increases in retirement benefits and an increase in the number of retirees from 101,184 as of June 30, 2014 to 103,501 as of June 30, 2015.

Refunds of contributions decreased \$6.8 million in FY15. The decrease during FY15 is the result of lower member and retirement refunds.

### Expenses by Type for the Year Ended June 30, 2015



## ACTUARIAL

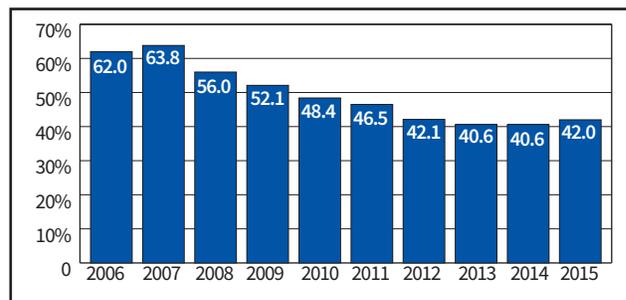
For statutory funding and financial reporting, an actuarial valuation is performed annually and measures the total liability for all benefits earned to date. The actuarial accrued liability is a present value estimate of all the benefits that have been earned to date but not yet paid. The actuarial accrued liability based on statutory funding requirements increased \$4.4 billion in FY15 to \$108.1 billion at June 30, 2015. The actuarial unfunded liability is the present value of future benefits payable that are not covered by the actuarial value of assets as of the valuation date. The actuarial unfunded liability increased \$1.1 billion during FY15 to \$62.7 billion at June 30, 2015. The funded ratio reflects the percentage of the actuarial accrued liability covered by the actuarial value of assets. The funded ratio increased from 40.6 percent on June 30, 2014 to 42.0 percent on June 30, 2015.

In FY15, the actuarial unfunded liability and funded ratio are based on a smoothed value of assets.

Public Act 96-0043 required the five state retirement systems to begin smoothing actuarial gains and losses on investments over a five-year period, beginning with the valuation for the year ended June 30, 2009.

When the funded ratio was based on the fair value of assets, the reported funded ratio was impacted immediately by changes in market conditions. State funding requirements based on fair value assets also were impacted immediately and therefore were more volatile. Using the smoothed value of assets results in more stable reported funded ratios and State funding requirements over time.

### Funded Ratio Based on Actuarial Value of Assets



The funded ratio in this chart is the ratio of actuarial assets to the actuarial liability. An increase in this ratio indicates an improvement in TRS's ability to meet future benefit obligations. The actuarial value of assets was based on fair value through 2008 with five-year smoothing beginning in 2009.

During FY14, TRS implemented GASB Statement No. 67, "Financial Reporting for Pension Plans." As a result of implementing the new statement, TRS is required to disclose the net pension liability and total pension liability in the Financial Statement Notes and Required Supplementary Information in accordance with criteria which differ from criteria used to disclose the actuarial accrued liability and actuarial unfunded liability. The total pension liability is \$111.9 billion at June 30, 2015, while the net pension liability is \$65.5 billion at June 30, 2015.

## LEGISLATIVE

Unlike the last few years, during FY15 there was no major legislative activity in the Illinois General Assembly affecting TRS or the state's other public pension systems.

This absence of legislation was caused by a 16-month constitutional challenge to a state law enacted in 2013, Public Act 98-0599, that reduced existing pension benefits. The benefit reductions were designed to help improve the fiscal health of Illinois' pension systems over the next 40 years.

The Illinois Supreme Court ruled unanimously on May 8, 2015 that Public Act 98-0599 was unconstitutional. The timing of that decision – during the last month of the General Assembly's spring session – precluded any meaningful action by legislators on any other proposals to alter the Illinois Pension Code.

A lengthy policy dispute between the General Assembly and Gov. Bruce Rauner that delayed

enactment of a FY16 budget for state government did not greatly affect the operations of TRS or the payment of benefits. Gov. Rauner and the legislature agreed and enacted legislation that allowed the state to pay its statutory contribution for FY16 of \$3.7 billion. However, the lack of a comprehensive state budget and lack of sufficient revenue left the state short of available cash at times to pay its obligations. As a result, while the State Comptroller's Office has indicated its intent to fully pay the state's FY16 contribution to TRS, it is not certain whether state government always will be able to remit the authorized contribution on a timely basis during FY16.

Benefits paid to members are funded by TRS assets and are not appropriated by the General Assembly; there was no interruption in the delivery of pensions and benefits.

## FINANCIAL STATEMENTS

### Teachers' Retirement System of the State of Illinois Statement of Fiduciary Net Position June 30, 2015

	2015
<b>Assets</b>	
Cash	\$45,709,535
Receivables and prepaid expenses:	
Member contributions	52,436,438
Employer contributions	13,620,835
State of Illinois	344,042,033
Investment income	113,824,855
Pending investment sales	5,219,465,652
Prepaid expenses	4,020,623
Total receivables and prepaid expenses	5,747,410,436
Investments, at fair value:	
Fixed income	8,697,165,058
Equities	18,475,666,319
Real estate	6,255,857,685
Short-term investments	848,587,909
Private equity investments	5,281,073,621
Real return	2,994,366,309
Absolute return	3,471,868,205
Foreign currency	74,142,815
Derivatives	936,964
Total investments	46,099,664,885
Invested securities lending collateral:	
Short-term investments	2,763,060,869
Fixed income	125,008,362
Securities lending collateral with the State Treasurer	55,448,000
Total invested securities lending collateral	2,943,517,231
Capital assets, net of accumulated depreciation	3,947,730
<b>Total assets</b>	<b>54,840,249,817</b>
<b>Liabilities</b>	
Benefits and refunds payable	6,928,533
Administrative and investment expenses payable	55,505,862
Pending investment purchases	5,427,366,418
Securities lending collateral	2,943,533,411
<b>Total liabilities</b>	<b>8,433,334,224</b>
<b>Net position restricted for pensions</b>	<b>\$46,406,915,593</b>

See accompanying Notes to Financial Statements.

**Teachers' Retirement System of the State of Illinois**  
**Statement of Changes in Fiduciary Net Position**  
**for the Year Ended June 30, 2015**

	2015
<b>Additions</b>	
Contributions:	
Members	\$935,451,049
State of Illinois	3,377,664,945
Employers	
Early retirement	13,930,699
Federal funds	69,764,609
2.2 benefit formula	56,610,761
Excess salary/sick leave	5,285,516
Total contributions	<u>4,458,707,579</u>
Investment income:	
Net increase in fair value of investments	753,800,289
Interest	241,478,494
Real estate operating income, net	295,551,944
Dividends	472,773,697
Private equity income	93,663,968
Other investment income	227,659,217
Securities lending income	10,166,086
Less investment expenses:	
Direct investment expense	(329,133,042)
Securities lending management fees	(941,907)
Securities lending borrower rebates	5,530,787
Net investment income	<u>1,770,549,533</u>
<b>Total additions</b>	<u>6,229,257,112</u>
<b>Deductions</b>	
Retirement benefits	5,281,221,313
Survivor benefits	224,779,380
Disability benefits	30,398,754
Refunds	88,637,726
Administrative expenses	21,686,860
<b>Total deductions</b>	<u>5,646,724,033</u>
Net increase in net position	582,533,079
<b>Net position restricted for pensions</b>	
Beginning of year	<u>45,824,382,514</u>
<b>End of year</b>	<u>\$46,406,915,593</u>

See accompanying Notes to Financial Statements.

## NOTES TO FINANCIAL STATEMENTS

### A. PLAN DESCRIPTION

#### 1. REPORTING ENTITY

The Teachers' Retirement System of the State of Illinois (TRS) is the administrator of a cost-sharing, multiple-employer defined benefit public employee retirement system (PERS). Membership is mandatory for all full-time, part-time and substitute public school personnel employed outside of Chicago in positions requiring licensure. Persons employed at certain State agencies and certain non-government entities also are members. Established by the State of Illinois, TRS is governed by the Illinois Pension Code (40 ILCS 5/16). TRS is a component unit of the State of Illinois and is included in the State's financial statements as a pension trust fund.

TRS uses criteria established by the Governmental Accounting Standards Board (GASB) to determine whether other entities should be included within its financial reporting entity. Based on the criteria, TRS includes no other entities in these financial statements.

#### 2. EMPLOYERS

Members of TRS are employed by school districts, special districts, certain State agencies and certain non-government entities. Each employer remits member contributions to TRS. Employers are responsible for employer contributions for teachers paid from federal funds, employer contributions for the 2.2 formula increase and for the employer's portion of the Early Retirement Option contributions. As a result of Public Act 94-0004, which became law on June 1, 2005, employers are also required to pay the cost of pension benefits resulting from salary increases of more than 6 percent. Public Act 94-1057, which became law on July 31, 2006, provides additional exemptions from employer contributions for excess salary increases. Some of these exemptions are permanent while others were available for a limited time period. Employers also pay a contribution for sick leave days granted in excess of the member's normal annual allotment and used for service credit at retirement. The contributions do not apply to salary increases awarded or sick leave

granted under contracts or collective bargaining agreements entered into, amended, or renewed prior to June 1, 2005. In addition, the State of Illinois is a nonemployer contributing entity that provides employer contributions on behalf of the System's employers. For information about employer contributions made by the State of Illinois, see the Schedule of Contributions from Employers and Other Contributing Entities.

#### Number of Employers (as of June 30)

	2015
Local school districts	855
Special districts	134
State agencies	17
<b>Total</b>	<b><u>1,006</u></b>

#### 3. MEMBERS

##### TRS Membership (as of June 30)

	2015
Retirees and beneficiaries	114,922
Inactive members	125,969
Active members	159,707
<b>Total</b>	<b><u>400,598</u></b>

#### 4. BOARD OF TRUSTEES

TRS is governed by a 13-member Board of Trustees. Trustees include the state superintendent of education, six trustees appointed by the governor, four trustees elected by contributing TRS members, and two trustees elected by TRS annuitants.

The president of the Board of Trustees, by law, is the Illinois superintendent of education. The Board of Trustees elects its vice president from among its members. The Board of Trustees appoints an executive director who also serves as the secretary of the Board of Trustees. The executive director is responsible for daily operations at TRS.

#### 5. BENEFIT PROVISIONS

Governed by the Illinois Pension Code (40 ILCS 5/16), which is subject to amendment by the Illinois General Assembly and approval by the governor, TRS provides retirement, death and disability benefits. Membership is mandatory for all full-time,

part-time, and substitute public school personnel employed in Illinois outside the city of Chicago.

Public Act 96-0889, which was signed into law in the spring of 2010, added a new section to the Pension Code that applies different benefits to anyone who first contributes to TRS on or after January 1, 2011 and does not have any previous service credit with one of the reciprocal retirement systems in Illinois. Members who first participate on or after that date are members of Tier II.

The act does not apply to anyone who made contributions to TRS prior to January 1, 2011. They remain participants of Tier I.

### **TIER I BENEFITS**

A member qualifies for an age retirement annuity after meeting one of the following requirements: age 62 with five years of service credit; age 60 with 10 years; or age 55 with 20 years. If a member retires between the ages of 55 and 60 with fewer than 35 years of service, the annuity will be reduced at the rate of 0.50 percent for each month the member is under age 60. A member who is age 55 and has at least 20 but fewer than 35 years of service credit may use the Early Retirement Option (ERO) to avoid a discount for early retirement if retirement occurs within six months of the last day of service requiring contributions and if the member and employer both make a one-time contribution to TRS. A member with fewer than five years of creditable service and service on or after July 1, 1947, is entitled to a single-sum benefit payable at age 65.

A retirement benefit is determined by the average of the four highest years of creditable earnings within the last 10 years of creditable service and the percentage of average salary to which the member is entitled. Most members retire under a formula that provides 2.2 percent of final average salary up to a maximum of 75 percent with 34 years of service. The 2.2 percent formula became effective July 1, 1998 but service earned before that date can be upgraded to the 2.2 formula with a member contribution. The cost of the upgrade can be reduced if members upgrade and continue teaching after 1998. A graduated formula applies to service

earned before 1998 and provides a maximum benefit of 75 percent of average salary with 38 years of service.

Tier I members who contributed to TRS before July 1, 2005 receive a money purchase (actuarial) benefit if it provides a higher benefit than the 2.2 or graduated formulas. The 75 percent cap does not apply to the money purchase benefit.

Essentially all Tier I retirees receive an annual 3 percent increase in the current retirement benefit beginning January 1 following the attainment of age 61 or on January 1 following the member's first anniversary in retirement, whichever is later.

Disability and death benefits are also provided.

If a member leaves covered employment, TRS will refund a member's retirement contributions upon request. The refund consists of actual contributions, excluding the 1 percent death benefit contribution.

Tier I members contribute 9.4 percent of their creditable earnings to TRS and an additional contribution to a retiree health insurance program that is not administered by TRS.

### **TIER II BENEFITS**

Changes from Tier I include raising the minimum eligibility to draw a retirement benefit to age 67 with 10 years of service. A discounted annuity can be paid at age 62 with 10 years of service. The Tier II law caps creditable earnings and contributions used for retirement purposes at a level that is lower than the Social Security Wage Base. Tier II annual increases will be the lesser of 3 percent of the original benefit or ½% of the rate of inflation beginning January 1 following attainment of age 67 or on January 1 following the member's first anniversary in retirement, whichever is later.

The 2.2 retirement formula also applies to Tier II but the final average salary is based on the highest consecutive eight years of creditable service rather than the last four. The single-sum benefit is also payable at age 65 to Tier II members with fewer than five years of service. Tier II members

cannot retire under ERO, and the money purchase (actuarial) benefit is not available to them.

Disability and refund provisions for Tier II are identical to those that apply to Tier I. Death benefits are payable under a formula that is different from Tier I.

Tier II members also contribute 9.4 percent of their creditable earnings to TRS and an additional contribution to a retiree health insurance program that is not administered by TRS.

## 6. ACTUARIAL MEASUREMENTS

The Schedule of Changes in the Net Pension Liability, Schedule of the Net Pension Liability, and the Schedule of Contributions from Employers and Other Contributing Entities may be found in the Required Supplementary Information.

Member, employer, and State contributions are statutorily defined by the Illinois Pension Code (40 ILCS 5/16), which is subject to amendment by the Illinois General Assembly and approval by the governor. Since July 1, 1995, State appropriations have been made through a continuing appropriation.

Effective July 1, 2005, member contributions increased from 9 percent to 9.4 percent of salary. These contributions are allocated as follows: 7.5 percent for retirement; 0.5 percent for post-retirement increases; 1 percent for death benefits; and 0.4 percent to help cover the cost of Early Retirement Option (ERO), which is refundable if the member does not retire using ERO or if the ERO program is terminated.

Employer contributions are made by or on behalf of employers from several sources. The State of Illinois provides the largest source of contributions through State appropriations from the Common School Fund. Employers also make contributions for the 2.2 benefit formula and for teachers who are paid from federal funds. Additionally, employers contribute their portion of the cost of ERO and any excess salary increase or sick leave costs due.

State funding law provides for a 50-year funding plan that includes a 15-year phase-in period.

Public Act 96-0043, which was effective July 15, 2009, required TRS to use a five-year smoothing method for asset valuation beginning on June 30, 2009. It first affected State contribution requirements in FY11.

Administrative expenses are budgeted and approved by the TRS Board of Trustees. Funding for these expenses is included in the employer contribution, as determined by the annual actuarial valuation.

## PENSION LIABILITY

The actuarial assumptions adopted in the June 30, 2015 actuarial valuation were used to calculate the June 30, 2015 total pension liability. Different assumptions were used to calculate the June 30, 2014 total pension liability. For both years, the long-term rate of return was 7.5 percent, as adopted by the Board of Trustees. It is based on a 2014 asset allocation study conducted by the TRS investment consultant and additional analyses in 2015 conducted by the TRS actuary.

The TRS actuary used the following assumed rates of returns by asset class, excluding 3.00 percent for the assumed rate of inflation and excluding investment expenses.

### Expected Arithmetic Real Returns over 30 Years

Asset Class	Allocation	Return
U.S. large cap	18%	7.53%
Global equity excluding U.S.	18	7.88
Aggregate bonds	16	1.57
U.S. TIPS	2	2.82
NCREIF	11	5.11
Opportunistic real estate	4	9.09
ARS	8	2.57
Risk parity	8	4.87
Diversified inflation strategy	1	3.26
Private equity	14	12.33

If the plan's assets are not sufficient to cover all benefit payments to current plan members, GASB Statement No. 67 requires the discount rate to be a blended rate, which includes the long-term expected rate of return and a municipal bond rate (the S & P Municipal Bond 20-Year High Grade Rate Index)

as of the end of the current fiscal year. Based on projections discussed below, the System is using a blended rate as the discount rate for the year ended June 30, 2015. The long-term expected rate of return is 7.50 percent for the year ended June 30, 2015 but the discount rate for the year ended June 30, 2015 is 7.47 percent.

TRS, with the assistance of the actuary, projected that the Plan's fiduciary net position will not be sufficient to provide for all benefit payments to current plan members. From FY2081 through FY2086, projected plan assets do not cover benefit payments, requiring the utilization of the June 30, 2015 S&P Municipal Bond 20-Year High Grade Rate Index of 3.73 percent for discounting benefit payments due during that six-year period.

For the calculation of the discount rate, projected contributions from members, employers, and the State of Illinois (nonemployer contributing entity) assume that all statutorily required contributions are made for all years in the future.

Estimated contributions from employers and the State of Illinois, of which the majority of the contribution (approximately 95 percent) is provided by the State of Illinois, are projected to be \$3.9 billion in 2016 and grow to \$9.4 billion in 2045 based on current statutory requirements for current members. Tier I's liability is partially funded by Tier II members, as the Tier II member contribution is higher than the cost of Tier II benefits. Due to this subsidy, contributions from future members in excess of the service cost are also included in the determination of the discount rate.

The actuarial cost method required for financial reporting purposes is the entry age normal method. For TRS, Total Pension Liability (TPL) is developed and rolled forward to the fiscal year end based on a

valuation date and member census one year prior. TPL is projected to June 30, 2015, based on a valuation date of June 30, 2014. Assets, referred to as Fiduciary Net Position, are measured at fair value.

### Net Pension Liability

	June 30, 2015
Total pension liability	\$111,916,989,345
Plan fiduciary net position	46,406,915,593
Net pension liability	<u>\$65,510,073,752</u>
Plan fiduciary net position as a percentage of the total pension liability	41.5%

### Sensitivity of the Net Pension Liability to Changes in the Discount Rate

	1% Decrease	Current	1% Increase
Discount rate	6.47%	7.47%	8.47%
Net pension liability	\$80,954,388,749	\$65,510,073,752	\$52,845,317,289

Most of the actuarial assumptions are based on the actuarial experience analysis dated August 2015 which covered the period July 1, 2011 through June 30, 2014. Its recommendations were adopted in the June 30, 2015 actuarial valuation and included reductions in the assumptions for salary increases, severance pay, mortality rates, disabilities, Tier II cost-of-living adjustments, salary caps, and the amount of sick leave and optional service used for retirement credit. The 2015 assumptions included increases in the rates of termination and retirement. The investment return and inflation assumptions that were adopted in the June 30, 2014 actuarial valuation were retained in the August 2015 experience analysis.

**Additional Information Regarding Assumptions used for Financial Reporting Disclosure and the Actuarial Valuation follow:**

<b>Actuarial Valuation Date</b>	June 30, 2015
<b>Census Date:</b>	June 30, 2014 with Total Pension Liability projected to June 30, 2015
<b>Actuarial Cost Method:</b>	
For financial reporting purposes	Entry age normal
<b>Amortization Method:</b>	
For financial reporting purposes	Level percent of payroll
<b>Remaining Amortization Period:</b>	
For financial reporting purposes	30 years, open
<b>Asset Valuation Method:</b>	
For financial reporting purposes	Fair value as of valuation date
<b>Actuarial Assumptions:</b>	
Investment rate of return (long-term)	7.5%
Real rate of investment return (long-term)	4.5%
Projected salary increases	9.75% with 1 year of service to 3.75% with 20 or more years of service. Includes inflation and real wage growth (productivity) assumptions.
Group size growth rate	0%
Assumed inflation rate	3.00%
Real wage growth (productivity)	0.75%
Post-retirement increase	Tier I: 3% compounded; Tier II: Lesser of 3% or ½ of the CPI increase, not compounded
<b>Mortality table</b>	RP - 2014 with future mortality improvements on a fully generational basis using projection table MP-2014.

**B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

**1. BASIS OF ACCOUNTING**

The financial transactions of TRS are recorded using the economic resources measurement focus and the accrual basis of accounting. Member and employer contributions are recognized as revenues when due pursuant to statutory or contractual requirements. Benefits and refunds are recognized as expenses when they are due and payable in accordance with the terms of the plan.

**2. USE OF ESTIMATES**

The preparation of 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 disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions to and deductions from net position during the reporting period. Actual results could differ from these estimates. TRS uses an actuary to determine the total pension liability for the defined benefit plan and to determine the actuarially-required contribution.

**3. RISKS AND UNCERTAINTIES**

TRS investments are diversified and include various investment securities. Investment securities are exposed to a variety of risk including credit, market and interest rate risk. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that value changes will occur in the near-term and such changes could materially affect the amounts reported in the Statement of Fiduciary Net Position.

**4. NEW ACCOUNTING PRONOUNCEMENTS**

GASB Statement No. 68, "Accounting and Financial Reporting for Pensions," was established to set standards for measuring and recognizing liabilities, deferred outflows of resources, deferred inflows of resources and expenses related to pensions. This statement identifies the methods and assumptions that should be used to project benefit payments, discount projected benefit payments to their actuarial present value and attribute that present value to periods of employee service. TRS assisted employers in their implementation of this statement for the year ended June 30, 2015.

GASB Statement No.71, "Pension Transition for Contributions Made Subsequent to the Measurement Date," was established to improve accounting and financial reporting by addressing an issue in GASB Statement No. 68, concerning transition provisions related to certain pension contributions made to defined benefit pension plans prior to implementation of the statement by

employers and nonemployer contribution entities. TRS assisted employers in implementing this statement simultaneously with the provisions of GASB Statement No. 68.

GASB Statement No. 72, "Fair Value Measurement and Application," was established to provide guidance for determining a fair value measurement for financial reporting purposes. This statement also provides guidance for applying fair value to certain investments and disclosures related to all fair value measurements. TRS is currently evaluating the financial statement impact of GASB Statement No. 72. This statement will be implemented for the year ended June 30, 2016.

GASB Statement No. 73, "Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement No. 68, and Amendments to Certain Provisions of GASB Statements No. 67 and 68," was established to improve the usefulness of information about pensions included in the general purpose external financial reports of state and local governments for making decisions and assessing accountability. This statement sets standards for defined benefit pensions that are not within the scope of GASB Statement No. 68, "Accounting and Financial Reporting for Pensions," as well as for assets accumulated for purposes of providing those pensions. It also establishes requirements for defined contribution pensions that are not within the scope of Statement No. 68 and it amends certain provisions of Statement No. 67, "Financial Reporting for Pension Plans," and Statement No. 68 for pension plans. TRS is currently evaluating the financial statement impact of GASB Statement No. 73. If applicable, this statement will be implemented for the year ended June 30, 2016.

GASB Statement No. 74, "Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans," was established to improve the usefulness of information about postemployment benefits other than pensions (other postemployment benefits or OPEB) included in the general purpose external financial reports of state and local governmental OPEB plans for making decisions and

assessing accountability. TRS is currently evaluating the financial statement impact of GASB Statement No. 74. If applicable, this statement will be implemented for the year ended June 30, 2017.

GASB Statement No. 75, "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions," was established to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions (other postemployment benefits of OPEB) and improves information provided by state and local governmental employers about financial support for OPEB that is provided by other entities. TRS is currently evaluating the financial statement impact of GASB Statement No. 75. If applicable, this statement will be implemented for the year ended June 30, 2018.

GASB Statement No. 76, "The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments," was established to identify the hierarchy of generally accepted accounting principles (GAAP). This hierarchy consists of the sources of accounting principles used to prepare financial statements of state and local governmental entities in conformity with GAAP and the framework for selecting these principles. This statement reduces the GAAP hierarchy to two categories of authoritative GAAP and addresses the use of authoritative and nonauthoritative literature in the event that the accounting treatment for a transaction or other event is not specified within the scope of authoritative GAAP. TRS is currently evaluating the financial statement impact of GASB Statement No. 76. If applicable, this statement will be implemented for the year ended June 30, 2016.

## **5. METHOD USED TO VALUE INVESTMENTS**

TRS reports investments at fair value. Fair value for publicly traded real return funds, equities, foreign currency and exchange traded derivatives is determined by using the closing price listed on national securities exchanges as of June 30. Fair value for fixed income securities and over-the-counter derivatives is determined primarily by using quoted market prices provided by independent pricing services. Short-term investments are generally

reported at average cost, which approximates fair value. Appraisals are used to determine fair value on directly-owned real estate investments. Fair value for private equity investments, absolute return funds, non-publicly traded real return funds and partnership interests in real estate funds is determined by TRS staff and the general partners or investment managers in accordance with the provisions in the individual agreements. These agreements also require that an independent audit be performed on an annual basis.

## 6. CAPITAL ASSETS

Equipment is stated on the basis of historical cost. Depreciation is computed using the straight-line method based upon the estimated useful lives of the assets. Capital assets activity for the year ended June 30, 2015 was as follows:

	Beginning Balance	Additions/ Transfers In	Disposals/ Transfers Out	Ending Balance
Land	\$235,534	\$ -	\$ -	\$235,534
Mineral Lease Rights	2,643	-	-	2,643
Office building	7,451,064	214,367	-	7,665,431
Site improvement	1,088,635	-	-	1,088,635
Equipment and furniture	2,453,455	540,759	335,615	2,658,599
Software	1,482,172	239,844	-	1,722,016
	12,713,503	994,970	335,615	13,372,858
Less accumulated depreciation:				
Office building	5,458,749	393,919	-	5,852,668
Site improvement	533,122	76,654	-	609,776
Equipment and furniture	1,897,959	451,595	335,615	2,013,939
Software	709,635	239,110	-	948,745
	8,599,465	1,161,278	335,615	9,425,128
	<u>\$4,114,038</u>	<u>(\$166,308)</u>	<u>\$ -</u>	<u>\$3,947,730</u>
The average estimated useful lives for depreciable capital assets are as follows:				
Office building				40 years
Equipment and furniture				3-10 years
Software				3-5 years

## 7. COMPENSATED ABSENCES

When employment is terminated, TRS employees are entitled to receive compensation for all accrued unused vacation time and one-half of all unused

sick leave earned through December 31, 1997. (Lump-sum payments for sick leave earned prior to January 1, 1984, are subject to a maximum of 60 days or 420 hours.) Sick time earned after December 31, 1997 is not compensable at termination.

At June 30, 2015, the System had a liability of \$2,030,085 for compensated absences. The liability is included in administrative and investment expenses payable on the Statement of Fiduciary Net Position. For non-investment staff, the increase or decrease in liability is reflected in the financial statements as administrative expense. For investment staff, the increase or decrease is reflected as investment expense. Compensated absences payable for the year ended June 30, 2015 was as follows:

	Beginning Balance	Additions	Reductions	Ending Balance
Compensated absences payable	\$1,881,735	\$1,040,069	\$891,719	\$2,030,085
The estimated amount due within one year is:			\$168,000	

## 8. RECEIVABLES

Receivables consist primarily of 1) member and employer contributions owed and yet to be remitted by the employing districts, 2) interest, dividends, real estate and private equity income owed to TRS, 3) appropriations not yet received from the State of Illinois as of June 30, and 4) pending investment sales.

TRS assesses penalties for late payment of contributions and may collect any unpaid amounts from the employing districts by filing a claim with the appropriate regional superintendent of education or the Office of the Comptroller against future state aid payments to the employer. TRS considers these amounts to be fully collectible.

## 9. RISK MANAGEMENT

TRS, as a component unit of the State of Illinois, provides for risks of loss associated with workers' compensation and general liability through the State's self-insurance program. TRS obtains commercial insurance for fidelity, surety and property.

No material commercial insurance claims have been filed in the last three fiscal years.

### C. CASH

Custodial credit risk for deposits is the risk that, in the event of a bank failure, TRS’s deposits may not be returned. TRS has a formal policy to address custodial credit risk. The policy is designed to minimize custodial credit risk through proper due diligence of custody financial institutions and investment advisors; segregate safekeeping of TRS assets; establish investment guidelines; and work to have all investments held in custodial accounts through an agent, in the name of custodian’s nominee, or in a corporate depository or federal book entry account system. For those investment assets held outside of the custodian, TRS will follow the applicable regulatory rules.

The non-investment bank balance and carrying amount of TRS’s deposits was \$45,709,535 at June 30, 2015. Of the bank balance, \$45,709,410 was on deposit with the State treasurer at June 30, 2015. State treasurer deposits are in an internal investment pool collateralized at a third party custodial bank and are not subject to custodial credit risk. Certain investments of TRS with maturities of 90 days or less would be considered cash equivalents; these consist of bank-sponsored, short-term investment funds, commercial paper and repurchase agreements. For financial statement presentation and investment purposes, TRS reports its cash equivalents as short-term investments in the Statement of Fiduciary Net Position. Included in the reported balances is the State Street Global Advisors Short-Term Investment Fund (STIF) with a value of \$585,399,968 at June 30, 2015. The STIF fund has an average credit quality rating of A1P1 and a weighted average maturity of 32.0 days.

For purposes of this disclosure, foreign currency held by investment managers is considered a deposit. However, for financial statement presentation and investment purposes, TRS considers foreign currency an investment asset. Uncollateralized foreign currency subject to custodial credit risk was \$74,142,815 at June 30, 2015.

## D. INVESTMENTS

### 1. INVESTMENT POLICIES

Through the Board of Trustees, as authorized in the Illinois Pension Code, TRS serves as fiduciary for the members’ trust funds and is responsible for investment of those funds by authority of the “prudent person rule.” This rule establishes a standard for all fiduciaries by specifying fiduciary responsibility with regard to the members’ trust funds.

#### LONG-TERM ASSET ALLOCATION

The Board of Trustees has the responsibility of establishing and maintaining broad policies and objectives for all aspects of the System’s operations, including the allocation of invested assets. 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 pension plan. The following table summarizes the Board-adopted, long-term allocation targets in effect as of June 30, 2015.

Long-term Asset Allocation Policy Mix	
Global equity	36%
Global fixed income	16
Real estate	15
Private equity	14
Real return	11
Absolute return	8
Short-term	0
<b>Total</b>	<b><u>100%</u></b>

### 2. INVESTMENT RISK

#### CUSTODIAL CREDIT RISK

Custodial credit risk for investments is the risk that, in the event of a financial institution failure, TRS would not be able to recover the value of the investments in the possession of an outside party. The TRS investment policy adopted by the Board of Trustees includes a formal process to address custodial credit risk. This policy requires the custodian to provide safekeeping of the System’s assets in segregated accounts and to have the assets registered in TRS’s name, custodian’s nominee name or in a corporate depository or federal book entry system.

## CONCENTRATION OF CREDIT RISK

Concentration of credit risk is the risk of loss that may be attributed to the magnitude of an investment in any one issuer. Investment parameters established in the Investment Management Agreements with external managers restrict holdings to no more than five percent of a single issuer within an account. The TRS portfolio has no investments in any one issuer that comprise five percent or more of the System's total investments.

## CREDIT RISK

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations to TRS. Credit risk exposure is dictated by each investment manager's agreement. Each portfolio is managed in accordance with investment guidelines that are specific as to permissible credit quality ranges, exposure levels within individual security quality rating tiers and/or the average credit quality of the overall portfolio. Most guidelines allow managers to hold bonds rated Caa2 or better. However, in circumstances where position downgrades occur, investment managers have been given permission to hold securities below this rating due to circumstances such as a higher peer group rating from another nationally-recognized statistical rating organization, the investment manager's internal ratings or other mitigating factors.

As of June 30, 2015, TRS held the following fixed income investments with respective Moody's quality ratings or equivalent rating. Obligations of the U.S. government or obligations explicitly guaranteed by the U.S. government are not considered to have credit risk.

Quality Rating	Corporate Debt Securities	Foreign Debt Securities	U.S. Treasuries & Agency Obligations	Municipals	Commingled Funds	Securities Lending Collateral	Total
Aaa	\$340,450,285	\$239,676,281	\$1,622,873,282	\$677,188	\$ -	\$ -	\$2,203,677,036
Aa1	34,582,621	473,888,080	16,040,775	4,154,102	-	-	528,665,578
Aa2	29,598,517	28,987,362	-	3,915,564	-	-	62,501,443
Aa3	48,487,394	134,113,388	-	3,746,448	-	-	186,347,230
A1	139,329,352	38,757,869	-	4,816,160	40,127,112	-	223,030,493
A2	160,298,575	92,451,493	-	4,003,765	-	125,008,362	381,762,195
A3	295,517,388	244,355,072	-	1,818,388	-	-	541,690,848
Baa1	257,037,647	67,575,210	-	-	-	-	324,612,857
Baa2	280,435,716	465,435,767	-	-	136,071,976	-	881,943,459
Baa3	345,956,004	256,813,938	-	-	-	-	602,769,942
Ba1	131,188,498	220,608,348	-	-	-	-	351,796,846
Ba2	179,557,562	95,080,035	-	-	28,532,367	-	303,169,964
Ba3	94,940,426	27,525,337	-	-	516,456,646	-	638,922,409
B1	110,031,800	133,200,162	-	-	210,316,988	-	453,548,950
B2	56,954,492	25,778,567	-	-	70,431,432	-	153,164,491
B3	43,808,091	31,594,681	-	-	-	-	75,402,772
Caa1	3,545,743	7,805,793	-	-	-	-	11,351,536
Caa2	12,936,670	2,692,768	-	-	-	-	15,629,438
Caa3	16,665,802	7,217,252	-	-	-	-	23,883,054
Ca	9,227,349	16,313,773	-	-	-	-	25,541,122
C	3,620,646	-	-	-	-	-	3,620,646
Not available	-	1,999,980	-	-	735,130,886	-	737,130,866
Not rated	38,055,383	31,689,698	-	-	-	-	69,745,081
Withdrawn	19,158,636	474	3,106,054	-	-	-	22,265,164
<b>Total bonds, corporate notes &amp; government obligations</b>	<b>\$2,651,384,597</b>	<b>\$2,643,561,328</b>	<b>\$1,642,020,111</b>	<b>\$23,131,615</b>	<b>\$1,737,067,407</b>	<b>\$125,008,362</b>	<b>\$8,822,173,420</b>

## INTEREST RATE RISK

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. TRS's fixed income investments are managed in accordance with operational guidelines that are specific as to the degree of interest rate risk that can be taken. TRS manages the interest rate risk within the portfolio using various methods including effective duration, option adjusted duration, average maturity and segmented time distribution, which reflect the total fair value of investments maturing during a given time period.

The segmented time distribution of the various investment types of TRS debt securities as of June 30, 2015 is as follows:

Type	2015 Fair Value	Maturity in Years					Other*
		Less Than 1 year	1 to 5 years	5 to 10 years	10 to 20 years	More Than 20 years	
U.S. treasuries	\$589,854,674	\$29,658,952	\$289,367,168	\$71,273,564	\$6,257,655	\$193,297,335	\$ -
U.S. federal agencies	60,025,758	-	51,496,928	6,932,386	1,493,024	103,420	-
U.S. government index-linked bonds	697,379,288	87,484,314	178,237,135	213,622,685	144,671,932	73,363,222	-
U.S. government-backed mortgages	294,760,391	(30,308,193)	8,572,067	49,547,782	103,526,566	163,422,169	-
Municipals	23,131,615	146,623	-	-	5,851,382	17,133,610	-
Asset-backed securities	341,421,950	342,582	185,627,932	51,726,494	50,900,489	52,824,453	-
Commercial mortgage-backed securities	74,360,665	-	817,989	2,530,503	16,462,120	54,550,053	-
Collateralized mortgage obligations	172,442,018	2,987	6,471,643	18,624,300	52,200,628	95,142,460	-
Commingled funds (U.S. & International)**	1,737,067,407	83,372,491	297,305,415	637,452,066	-	-	718,937,435
Corporate convertible bonds	37,674,963	8,504,102	12,642,250	9,854,902	1,658,547	5,015,162	-
Domestic credit obligations	2,025,485,001	337,912,064	762,313,650	713,966,644	50,794,681	160,497,962	-
Foreign debt/corporate obligations	2,643,561,328	332,751,145	871,250,139	958,873,763	181,345,162	299,341,119	-
<b>Total bonds, corporate notes and government obligations</b>	<b>8,697,165,058</b>	<b>849,867,067</b>	<b>2,664,102,316</b>	<b>2,734,405,089</b>	<b>615,162,186</b>	<b>1,114,690,965</b>	<b>718,937,435</b>
Derivatives	936,964	(3,986,966)	445,787	(189,948)	2,986,088	1,682,003	-
Securities-lending collateral	125,008,362	125,008,362	-	-	-	-	-
<b>Total bonds, corporate notes, government obligations, securities lending collateral and derivatives</b>	<b>\$8,823,110,384</b>	<b>\$970,888,463</b>	<b>\$2,664,548,103</b>	<b>\$2,734,215,141</b>	<b>\$618,148,274</b>	<b>\$1,116,372,968</b>	<b>\$718,937,435</b>

\* Maturity date is not available or applicable.

\*\* Weighted average maturity figures were used if available to plot the commingled funds within the schedule.

## FOREIGN CURRENCY RISK

Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. TRS's currency risk exposure, or exchange rate risk, is primarily derived from its holdings in foreign currency-denominated equity, fixed income and derivative investments, as well as foreign currency. According to TRS's Investment Policy and investment manager agreements, international equity and global fixed income managers, at their discretion, may or may not hedge the portfolio's foreign currency exposures with currency forward contracts or options, depending upon their views on a specific country or foreign currency relative to the U.S. dollar. TRS's exposure to foreign currency risk in U.S. dollars as of June 30, 2015 is as follows:

Currency	Foreign Currency	Equities	Fixed Income	Derivatives	Total
Australian Dollar	\$5,621,395	\$252,259,170	\$37,423,798	\$95,205	\$295,399,568
Brazilian Real	1,836,352	116,765,384	90,062,453	(1,161,023)	207,503,166
British Pound	9,857,140	1,430,010,470	334,411,507	201,609	1,774,480,726
Canadian Dollar	1,854,116	468,037,031	35,849,073	-	505,740,220
Chilean Peso	359,898	6,281,269	2,561,957	-	9,203,124
Chinese Yuan Renminbi	22,866	-	-	-	22,866
Columbia Peso	237,208	1,160,646	7,099,309	-	8,497,163
Czech Koruna	6,892	2,511,028	-	-	2,517,920
Danish Krone	34,235	130,338,311	14,347,845	-	144,720,391
Egyptian Pound	81,609	3,162,290	-	-	3,243,899
Emirati Dirham	8,956	7,286,741	-	-	7,295,697
Euro	15,053,472	1,766,371,966	500,864,719	2,287,122	2,284,577,279
Ghana Cedi	148,983	-	14,554,696	-	14,703,679
Hong Kong Dollar	3,760,391	636,567,398	-	-	640,327,789
Hungarian Forint	683,391	7,417,736	26,964,032	-	35,065,159
Indian Rupee	270,856	141,777,790	22,706,345	-	164,754,991
Indonesian Rupiah	434,504	63,463,317	31,213,748	-	95,111,569
Israeli Shekel	4,253,608	29,989,337	-	-	34,242,945
Japanese Yen	11,281,532	1,339,181,759	46,122,897	526,150	1,397,112,338
Malaysian Ringgit	1,013,419	45,840,489	36,647,160	-	83,501,068
Mexican Peso	5,800,226	63,833,786	173,835,119	(555,855)	242,913,276
Moroccan Dirham	509	-	-	-	509
New Taiwan Dollar	1,363,545	205,152,430	-	-	206,515,975
New Zealand Dollar	1,392,953	19,824,153	39,436,686	239,816	60,893,608
Norwegian Krone	622,279	53,639,728	7,984,866	-	62,246,873
Philippine Peso	81,678	33,376,081	10,087,494	-	43,545,253
Polish Zloty	808,623	23,947,191	34,184,478	-	58,940,292
Qatari Rial	4,645	5,016,666	-	-	5,021,311
Russian Ruble	-	8,183,172	4,076,863	-	12,260,035
Serbian Dinar	527,881	-	31,690,717	-	32,218,598
Singapore Dollar	614,595	193,381,107	12,937,667	-	206,933,369
South African Rand	1,676,254	161,803,168	3,644,168	-	167,123,590
South Korean Won	3,439,339	293,791,891	79,537,953	(27,234)	376,741,949
Sri Lanka Rupee	260,700	-	12,522,044	-	12,782,744
Swedish Krona	210,461	164,313,826	11,039,158	-	175,563,445
Swiss Franc	8,074	611,358,027	-	-	611,366,101
Thailand Baht	277,135	65,272,852	6,475,160	-	72,025,147
Turkish Lira	272,894	48,142,267	9,187,458	-	57,602,619
Ukraine Hryvnia	(111,081)	-	112,753	-	1,672
Uruguayo Peso	71,282	-	56,169,377	-	56,240,659
<b>Total subject to foreign currency risk</b>	<b>74,142,815</b>	<b>8,399,458,477</b>	<b>1,693,751,500</b>	<b>1,605,790</b>	<b>10,168,958,582</b>
Investments in international securities payable in U.S. dollars	-	1,416,523,414	980,346,655	(3,180,525)	2,393,689,544
<b>Total international investment securities (including domestic securities payable in foreign currency)</b>	<b>74,142,815</b>	<b>9,815,981,891</b>	<b>2,674,098,155</b>	<b>(1,574,735)</b>	<b>12,562,648,126</b>
Domestic investments (excluding securities payable in foreign currency)	-	8,659,684,428	6,023,066,903	2,511,699	14,685,263,030
<b>Total fair value</b>	<b>\$74,142,815</b>	<b>\$18,475,666,319</b>	<b>\$8,697,165,058</b>	<b>\$936,964</b>	<b>\$27,247,911,156</b>

In addition to the previous table, the fair value of TRS's investments in foreign currency denominated real estate and private equity funds was \$63,946,221 and \$444,619,972 at June 30, 2015, respectively. Currencies included euro, British pound, Canadian dollar, Japanese yen and South Korean won.

### 3. SECURITIES LENDING PROGRAM

The Board of Trustees' policies permit TRS to use investments to enter into securities lending transactions, which are loans of securities to broker-dealers or other approved entities. The borrower of a security must post collateral in excess of the fair value of the security. TRS receives both cash and non-cash (*i.e.*, securities) collateral. Eligible forms of collateral include cash consisting of U.S. dollar, euro, sterling and yen, U.S. treasuries, government agency securities, certificates of deposit, letters of credit issued by approved banks and specific types of corporate debt obligations and common stock. Initial collateral received from the borrower must be at least 102 percent of the fair value of all loaned securities except non-U.S. securities which require 105 percent. Securities on loan are marked to market daily and collateral for the loan is required not to fall below minimum levels established by TRS and its lending agent. Agreements are in place for TRS to return the collateral in exchange for the original securities upon demand or when the security is no longer borrowed. TRS does not have the authority to pledge or sell collateral securities, without borrower default; as such, the collateral security or non-cash collateral is not reported in TRS's financial statements in accordance with GASB Statement No. 28.

As of June 30, 2015, Citibank, N.A. served as the third-party securities lending agent for the fixed income, domestic equity and international equity lending programs. In this capacity, TRS reduces credit risk by allowing Citibank to lend securities to a diverse group of dealers on behalf of TRS. At fiscal-year end, TRS has no credit risk exposure to borrowers because the amount TRS owes the borrowers exceeds the amount the borrowers owe TRS. The contract with TRS's lending agent requires

the agent to indemnify TRS if the borrowers fail to return the securities (and if the collateral is inadequate to replace the securities lent) or fail to pay TRS for income distributions by the securities issuers while the securities are on loan. Securities on loan can be recalled on demand by TRS or the borrower can return the loaned securities at any time, although the weighted average term of the loans is 33 days. Since loans are terminable at will, the maturity of loans generally does not match the maturity of collateral investments. TRS may enter into term loan agreements, which are evaluated on an individual basis. As of June 30, 2015, there was one 95-day term loan with a loan market value of \$89,085,520.

The cash collateral received is invested in a separate account managed by the lending agent, with a weighted average maturity of 50 days at June 30, 2015. There were no significant violations of legal or contractual provisions, and there were no borrower or lending agent default losses known to the securities lending agent.

As of June 30, 2015, TRS had outstanding loaned investment securities with a fair value of \$2,896,736,153 against which it had received cash and non-cash collateral with a fair value of \$2,990,363,865. The securities on loan remain on TRS's Statement of Fiduciary Net Position in their respective investment categories. As of June 30, 2015, TRS cash collateral received and reported as securities lending obligation on the Statement of Fiduciary Net Position totaled \$2,888,085,411; whereas, the fair value of reinvested cash collateral reported as securities lending collateral was \$2,888,069,231. The change in fair value of the reinvested cash collateral is included as net appreciation/depreciation within investment income in the Statement of Changes in Fiduciary Net Position. TRS also reports securities lending collateral with the Office of the Illinois State Treasurer on the Statement of Fiduciary Net Position. Further detail on this amount can be obtained by calling the Office of the Illinois State Treasurer at (217) 558-1250 or by visiting [www.treasurer.il.gov](http://www.treasurer.il.gov).

Income earned and costs related to securities lending activities are reported on the Statement of Changes in Fiduciary Net Position. For FY15, the system earned net income of \$14,754,966 from securities lending.

#### 4. DERIVATIVES

TRS, through its investment managers, invests in derivative securities as a fundamental part of the overall investment process. All TRS derivatives are considered investments and the fair value is reported in the Statement of Fiduciary Net Position. TRS does not directly invest in derivatives but allows certain external managers to utilize these instruments within the investment portfolio for a variety of purposes. TRS managers may hold derivatives to hedge investment transactions accounted for at fair value. The term “hedge” in this context denotes the broad economic activity of entering into contracts intended to offset risks associated with certain transactions, such as the changes in interest rates on investments in debt securities, commodities or instruments denominated in a foreign currency. Assets and liabilities that are measured at fair value, such as investments, do not qualify as hedgeable items and do not meet the requirements for hedge accounting.

A derivative security is an investment whose return depends upon the value of another financial instrument or security such as stocks, bonds, commodities, or a market index. The derivative investments in TRS’s portfolio are used primarily to enhance performance and reduce volatility. TRS’s investments in derivatives are not leveraged through borrowing. In the case of an obligation to purchase (long a financial future or call option), the full value of the obligation is primarily held in cash or cash equivalents. For obligations to sell (short a financial future or put option), the reference security is held in the portfolio.

To varying degrees, derivative transactions involve credit risk, sometimes known as default

or counterparty 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 the established contract terms. To eliminate credit risk, derivative securities can be acquired through a clearinghouse that guarantees delivery and accepts the risk of default by either party.

Market risk is the possibility that a change in interest, currency, or other pertinent market rates will cause the value of a financial instrument to decrease or become more costly to settle. Imposing limits on the types, amounts, and degree of risk that investment managers may undertake restricts the market risk associated with the constantly fluctuating prices of derivatives. These limits are approved by the Board of Trustees and senior management, and the derivative positions of the investment managers are reviewed on a regular basis to monitor compliance.

As of June 30, 2015, derivative investments in the TRS investment portfolio included currency forward contracts, rights, warrants, futures, options, swaps, and swaptions. Within the financial statements, currency forward contracts are reflected as investment payables/receivables, rights and warrants are reflected as equities, and all futures, options, swaps and swaptions are classified as derivatives. The change in fair value of derivative investments is included in investment income on the Statement of Changes in Fiduciary Net Position.

The following tables summarize the derivatives held within the TRS investment portfolio and the change in fair value of derivative investments, realized and unrealized, during the fiscal year. The notional amounts shown represent TRS’s financial exposure to these instruments in U.S. dollars. Investments in limited partnerships and commingled funds may include derivatives that are not covered in the following disclosure.

As of June 30, 2015, the TRS investment portfolio held the following derivatives.

Investment Derivatives	Fair Value at June 30, 2015	Change in Fair Value	Shares/Par	Notional
Rights	\$798,144	(\$176,135)	6,879,112	\$6,879,112
Warrants	14,292,973	607,035	1,946,560	1,946,560
Currency forwards	59,325,144	182,435,434	-	-
Equity futures long	-	26,981,261	17,929,021	240,677,328
Equity futures short	-	1,383,677	(131,400)	(55,122,541)
Fixed income futures long	-	15,324,282	516,086,518	618,216,803
Fixed income futures short	-	(24,353,096)	(2,373,392,813)	(2,430,408,670)
Commodity futures long	-	(13,810,779)	4,267,011	100,251,263
Commodity futures short	-	13,537,584	(26,342,900)	(66,807,434)
Equity options purchased	1,557,922	(344,650)	338,099	19,438,187
Equity options written	(737,816)	3,000,237	(153,794)	12,271,344
Currency forward options purchased	942,058	2,233,474	119,798,009	22,352,190
Currency forward options written	(1,156,101)	2,118,760	(154,302,155)	31,170,788
Options on futures purchased	56,375	(734,365)	15,398,179	44,419,851
Options on futures written	(345,188)	1,992,703	(42,000,557)	20,971,946
Swaptions purchased	5,450,546	2,618,394	825,585,291	19,963,592
Swaptions written	(5,517,632)	3,677,807	(946,333,326)	103,277,042
Inflation options written	(461,532)	(266,228)	(58,553,719)	4,974,384
Credit default swaps buying protection	-	72,785	-	-
Credit default swaps selling protection	(121,157)	(5,686,999)	378,390,073	378,390,205
Index and variance swaps	68,096	(5,069,319)	30,846,089	31,221,997
Pay fixed interest rate swaps	7,072,123	(9,634,675)	1,508,867,069	1,508,992,077
Receive fixed interest rate swaps	(1,608,798)	(642,764)	541,363,138	540,200,578
Pay fixed inflation swaps	(3,513,126)	(2,710,863)	173,335,916	169,823,164
Receive fixed inflation swaps	(748,806)	(730,620)	89,724,745	89,204,989
<b>Grand totals</b>	<b><u>\$75,353,225</u></b>	<b><u>\$191,822,940</u></b>		<b><u>\$1,412,304,755</u></b>

## CURRENCY FORWARD CONTRACTS

**Objective:** Currency forward contracts are agreements to exchange one currency for another at an agreed upon price and settlement date. TRS's investment managers use these contracts primarily to hedge the currency exposure of its investments.

**Terms:** Currency forward contracts are two-sided contracts in the form of either forward purchases or forward sales. Forward purchases obligate TRS to purchase specific currency at an agreed upon price. Forward sales obligate TRS to sell specific currency at an agreed upon price. As of June 30, 2015, TRS had currency forward purchase or sale contracts for 34 different currencies with various settlement dates.

**Fair Value:** As of June 30, 2015, TRS's open currency forward contracts had a net fair value (unrealized gain) of \$59,325,144.

## FINANCIAL FUTURES

**Objective:** Financial futures are agreements to purchase or sell a specific amount of an asset at a specified delivery or maturity date for an agreed upon price. These derivative securities are used to improve yield, adjust the duration of the fixed income portfolio, protect against changes in interest rates, or replicate an index.

**Terms:** Futures contracts are standardized and traded on organized exchanges, thereby minimizing TRS's credit risk. As the daily market value of the futures contract varies from the original contract price, a gain or loss is recognized and paid to, or received from, the clearinghouse. As of June 30, 2015, TRS had outstanding futures contracts with a notional value, or exposure, of (\$1,593,193,251). Notional values do not represent the actual values in the Statement of Fiduciary Net Position. The contracts have various expiration dates through September 2017.

**Fair Value:** Gains and losses on futures contracts are settled daily based on the change of the index or commodity price for the underlying notional value. Because of daily settlement, the futures

contracts have no fair value. TRS's realized gain on futures contracts was \$34,741,278 during FY15.

Type	Number of Contracts	Notional Principal
<b>Commodity Futures</b>		
Commodity futures - long	2,566	\$100,251,263
Commodity futures - short	(1,147)	(66,807,434)
<b>Equity Futures</b>		
U.S. stock index futures - long	577	55,518,090
U.S. stock index futures - short	(20)	(362,500)
International equity index futures - long	5,657	185,159,238
International equity index futures - short	(3,257)	(54,760,041)
<b>Fixed Income/Cash Equivalent Futures</b>		
Fixed income index futures - long	3,493	444,662,555
Fixed income index futures - short	(2,820)	(539,202,016)
International fixed income index futures - long	214	34,314,048
International fixed income index futures - short	(226)	(32,724,717)
Cash equivalent (eurodollar) futures - long	561	139,240,200
Cash equivalent (eurodollar) futures - short	(7,521)	(1,858,481,937)
<b>Total futures (net)</b>	<b>(1,923)</b>	<b>(\$1,593,193,251)</b>

## FINANCIAL OPTIONS

**Objective:** Financial options are agreements that give 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. The owner (buyer) of an option has all the rights, while the seller (writer) of an option has the obligations of the agreement. As a writer of financial options, TRS 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. Premiums received are recorded as a liability when the financial option is written. The Options Clearing Corporation (OCC) performs much the same function for options markets as the clearinghouse does for futures markets.

**Terms:** As of June 30, 2015, the TRS investment portfolio held equity options with notional value of \$31,709,531, currency forward options with notional value of \$53,522,978, inflation options with notional value of \$4,974,384, and options on futures with underlying notional value of \$65,391,797. Contractual principal/notional values do not represent the actual values in the Statement of Fiduciary Net Position. The contracts have various expiration dates through June 2035.

**Fair Value:** Fluctuations in the fair value of financial options are recognized in TRS's financial statements as incurred rather than at the time the options are exercised or expire. As of June 30, 2015, the fair value of all option contracts, gross of premiums received, was (\$144,282). The fair value represents the amount needed to close all positions as of that date. The following table presents the aggregate contractual principal (notional value) of outstanding contracts as of June 30, 2015. Notional principal amounts are often used to express the volume of these transactions but do not reflect the extent to which positions may offset one another. Options on futures represent the corresponding futures exposure.

Type	Number of Contracts	Notional Principal
<b>Equity Options</b>		
Equity call options - purchased	5,799	\$19,091,519
Equity put options - written	(3,774)	73,557
Equity index call options - purchased	1,104	346,668
Equity index call options - written	(336)	26,206
Equity index put options - written	(1,769)	12,171,581
<b>Currency Forward Options</b>		
Currency forward call options - purchased	13	15,071,024
Currency forward call options - written	35	18,772,488
Currency forward put options - purchased	3	7,281,166
Currency forward put options - written	13	12,398,300
<b>Inflation Options</b>		
Inflation call options - written	7	4,683,617
Inflation put options - written	10	290,767
<b>Options on Futures</b>		
Fixed income call options on futures USD - written	(155)	11,874,895
Fixed income put options on futures USD - purchased	410	39,691,075
Fixed income put options on futures USD - written	(107)	290,368
Fixed income call options on futures (non-dollar) - purchased	129	4,728,776
Fixed income call options on futures (non-dollar) - written	(244)	5,550,275
Fixed income put options on futures (non-dollar) - written	(129)	143,732
Commodity call options on futures USD - written	(17)	2,644,350
Commodity put options on futures USD - written	(8,900)	468,326

## SWAPTIONS

**Objective:** 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. An interest-rate swaption gives the buyer the right to pay or receive a specified fixed interest rate in a swap in exchange for a floating rate for a stated time period. TRS has both written and purchased interest rate swaptions in its portfolio. In a written call swaption, the seller (writer) is obligated to pay a fixed rate in exchange for a floating rate for a stated period of time and in a written put swaption, the seller is obligated to receive a fixed rate in exchange for a floating rate if the swaption is exercised. A purchased (long) call swaption gives the buyer the right

to receive a fixed rate in exchange for a floating rate for a stated period of time while a purchased (long) put swaption gives the buyer the right to pay a fixed rate in exchange for a floating rate if the swaption is exercised.

The TRS investment portfolio also holds credit default swaptions. A credit default swaption gives the holder the right, but not the obligation to buy (call) or sell (put) protection on a specified entity or index for a specified future time period.

As the writer of a swaption, TRS receives a premium at the outset of the agreement. Premiums are recorded as a liability when the swaption is written. As the purchaser of a swaption, TRS pays an upfront premium.

**Terms:** As of June 30, 2015, TRS had outstanding written call swaption exposure of \$15,513,729, written put swaption exposure of \$87,763,313, purchased call swaption exposure of \$4,058,956, and purchased put swaption exposure of \$15,904,636. The contracts have various maturity dates through August 2021. Exposure amounts for swaptions do not represent the actual values in the Statement of Fiduciary Net Position.

**Fair Value:** Fluctuations in the fair value of swaptions are recognized in TRS's financial statements as incurred rather than at the time the swaptions are exercised or when they expire. As of June 30, 2015, the fair value of swaption contracts was (\$67,086).

#### **CREDIT DEFAULT SWAPS/INDEX SWAPS**

**Objective:** Credit default swaps are financial instruments used to replicate the effect of investing in debt obligations of corporate bond issuers as a means to manage bond exposure, effectively buying or selling insurance protection in case of default. Credit default swaps may be specific to an individual security or to a specific market sector (index swaps). The risk of the credit default/index swap is comparable to the credit risk of the underlying debt obligations of issuers that comprise the credit default/index swap, with the primary risk

being counterparty risk. The owner/buyer of protection (long the swap) pays an agreed upon premium to the seller of protection (short the swap) for the right to sell the debt at a previously agreed upon value in the event of a default by the bond issuer. The premium is paid periodically over the term of the swap or until a credit event of the bond issuer occurs. In the event of a default, the swap is called, and the seller of protection makes a payment to the buyer, which is usually based on a fixed percentage of total par.

Purchased credit default swaps decrease credit exposure (buying protection), providing the right to sell debt to the counterparty in the event of a default. A buyer of credit protection against a basket of securities pays an upfront or periodic payment until either maturity or default. In the event of a default, the buyer receives a lump-sum payment. If no default occurs, the buyer loses only the premium paid.

Written credit default swaps increase credit exposure (selling protection), obligating the portfolio to buy debt from counterparties in the event of a default. A seller of credit protection against a basket of securities receives an upfront or periodic payment to compensate against potential default events. If a default event occurs, the seller must pay the buyer the full notional value of the obligation in exchange for the obligation. If no default occurs, the seller will have earned the premium paid.

**Terms:** As of June 30, 2015, TRS had credit default/index swaps in its portfolio with various maturity dates through May 2046. The notional values as of June 30, 2015 included written credit default swaps (selling protection) of \$378,390,205 and index swaps of \$31,221,997.

**Fair Value:** The fair value of credit default swaps, including index swaps, held by TRS was (\$53,061) as of June 30, 2015. This represents the amount due to or (from) TRS under the terms of the counterparty agreements.

## INTEREST RATE SWAPS

**Objective:** Interest rate swaps are agreements between parties to exchange a set of cash flow streams over a period of time. In the most common type of interest rate swap arrangement, one party agrees to pay fixed interest payments on designated dates to a counterparty who, in turn, agrees to make return interest payments that float with some reference rate. Long positions (receive fixed) increase exposure to long-term interest rates; short positions (pay fixed) decrease interest rate/risk exposure.

**Terms:** As of June 30, 2015, TRS held interest rate swaps in various currencies with various expiration/maturity dates ranging from 2015 to 2046. Swap agreements typically are settled on a net basis, with a party receiving or paying only the net amount of the fixed/floating payments. Payments may be made at the conclusion of a swap agreement or periodically during its term.

**Fair Value:** The table below presents the fair value of TRS's interest rate swap exposure as of June 30, 2015.

	As of June 30, 2015
Receive floating/pay fixed	\$7,072,123
Receive fixed/pay floating	(1,608,798)

## INFLATION-LINKED SWAPS

**Objective:** Inflation-linked swaps are agreements where a fixed payment is exchanged for a variable payment linked to an inflation index. These swaps can protect against unfavorable changes in inflation expectations and are used to transfer inflation risk from one counterparty to another.

**Terms:** As of June 30, 2015, TRS was a party to inflation-linked swaps denominated in various currencies with expiration dates through January 2045. Inflation-linked swaps initially have no net value; the value of the swap's outstanding payments will change as interest and inflation rates change. The value may be either positive or negative.

**Fair value:** The fair value of the inflation-linked swaps held by TRS was (\$4,261,932) as of June 30, 2015.

## DERIVATIVE INTEREST RATE RISK

Interest rate risk for derivative securities is disclosed in the Financial Note D. 2. Both interest rate and inflation rate swaps have fair values that are sensitive to interest rate changes.

TRS had the following interest rate and inflation swaps at June 30, 2015.

Asset Description	Par	Gross Notional	TRS Receives	TRS Pays	Maturity Date	Fair Value 6/30/15
<b>Pay Fixed Interest rate swaps:</b>						
Interest rate swap USD	274,900,000	\$274,900,000	3 month LIBOR	1.30%	5/6/2017	(\$387,636)
Interest rate swap USD	92,500,000	92,500,000	3 month LIBOR	1.85	5/18/2017	(610,466)
Interest rate swap USD	59,200,000	59,200,000	3 month LIBOR	1.50	7/1/2017	(127,748)
Interest rate swap GBP	11,200,000	17,614,245	6 month LIBOR	1.50	9/16/2017	(96,654)
Interest rate swap USD	31,600,000	31,600,000	3 month LIBOR	1.50	10/1/2017	(48,241)
Interest rate swap USD	41,860,000	41,879,574	3 month LIBOR	0.93	10/17/2017	89,015
Interest rate swap USD	43,300,000	43,300,000	3 month LIBOR	1.50	12/16/2017	(230,359)
Interest rate swap USD	236,200,000	236,200,000	3 month LIBOR	1.75	12/16/2018	(1,395,578)
Interest rate swap USD	100,000	100,000	3 month LIBOR	2.00	12/16/2019	(763)
Interest rate swap USD	5,300,000	5,300,000	3 month LIBOR	2.00	12/16/2020	1,829
Interest rate swap BRL	9,100,000	2,991,912	3 month Brazilian CDI	11.68	1/4/2021	62,477
Interest rate swap BRL	500,000	161,249	3 month Brazilian CDI	12.23	1/4/2021	291
Interest rate swap USD	199,600,000	199,600,000	3 month LIBOR	2.25	12/16/2022	839,152
Interest rate swap USD	39,970,000	39,970,313	3 month LIBOR	2.79	3/31/2024	(1,400,777)
Interest rate swap USD	32,860,000	32,878,008	3 month LIBOR	2.73	7/7/2024	(951,181)
Interest rate swap USD	13,890,000	13,896,920	3 month LIBOR	1.91	1/22/2025	633,486
Interest rate swap USD	17,360,000	17,368,541	3 month LIBOR	1.97	1/23/2025	707,928
Interest rate swap USD	10,240,000	10,244,735	3 month LIBOR	1.97	1/27/2025	415,749
Interest rate swap USD	2,560,000	2,561,250	3 month LIBOR	1.94	1/29/2025	112,165
Interest rate swap USD	2,170,000	2,171,040	3 month LIBOR	1.94	1/30/2025	94,328
Interest rate swap USD	3,420,000	3,421,492	3 month LIBOR	1.82	2/3/2025	186,908
Interest rate swap USD	7,050,000	7,050,110	3 month LIBOR	1.98	3/27/2025	294,950
Interest rate swap USD	7,050,000	7,050,110	3 month LIBOR	1.99	3/27/2025	290,351
Interest rate swap USD	16,000,000	16,000,000	3 month LIBOR	3.00	6/17/2025	154,129
Interest rate swap USD	7,760,000	7,760,000	3 month LIBOR	2.45	7/2/2025	-
Interest rate swap EUR	56,550,000	63,008,005	6 month EURIBOR	0.75	9/16/2025	2,805,673
Interest rate swap GBP	9,360,000	14,720,476	6 month LIBOR	2.00	9/16/2025	284,933
Interest rate swap USD	129,200,000	129,200,000	3 month LIBOR	2.50	12/16/2025	1,026,440
Interest rate swap USD	19,030,000	19,030,149	3 month LIBOR	3.49	3/31/2044	(2,102,561)
Interest rate swap GBP	8,720,000	13,713,948	6 month LIBOR	2.00	9/16/2045	1,147,884
Interest rate swap USD	103,600,000	103,600,000	3 month LIBOR	2.75	12/16/2045	5,276,399
<b>Total pay fixed interest rate swaps:</b>		<b><u>\$1,508,992,077</u></b>				<b><u>\$7,072,123</u></b>
<b>Receive Fixed Interest rate swaps:</b>						
Interest rate swap NZD	100,000,000	\$68,017,629	4.00%	3 month NZD Bank Bill	12/11/2015	\$239,816
Interest rate swap MXN	1,100,000	71,796	5.60	28 day Mexican TIIE	9/6/2016	1,515
Interest rate swap MXN	239,700,000	15,283,945	4.04	28 day Mexican TIIE	2/3/2017	(13,871)
Interest rate swap GBP	16,000,000	25,170,199	1.25	6 month LIBOR	6/17/2017	(71,459)
Interest rate swap BRL	41,300,000	13,047,590	12.18	3 month Brazilian CDI	1/2/2018	(247,542)
Interest rate swap BRL	137,600,000	43,699,251	12.36	3 month Brazilian CDI	1/2/2018	(596,397)
Interest rate swap BRL	272,800,000	87,767,147	13.03	3 month Brazilian CDI	1/2/2018	(51,550)
						(continued)

(continued)

Asset Description	Par	Gross Notional	TRS Receives	TRS Pays	Maturity Date	Fair Value 6/30/15
Interest rate swap BRL	62,200,000	\$20,038,135	13.22%	3 month Brazilian CDI	1/2/2018	\$14,958
Interest rate swap MXN	70,000,000	4,602,082	5.70	28 day Mexican TIE	1/18/2019	126,941
Interest rate swap GBP	7,600,000	11,974,750	2.05	6 month LIBOR	9/23/2019	(219,552)
Interest rate swap EUR	2,000,000	2,228,460	0.43	6 month EURIBOR	12/11/2019	(1,329)
Interest rate swap MXN	228,800,000	14,599,419	5.27	28 day Mexican TIE	2/5/2020	17,486
Interest rate swap MXN	201,200,000	12,787,967	5.15	28 day Mexican TIE	4/2/2020	(84,436)
Interest rate swap MXN	96,000,000	6,149,254	5.43	28 day Mexican TIE	6/12/2020	19,887
Interest rate swap USD	2,300,000	2,298,099	2.00	3 month LIBOR	12/16/2020	(1,900)
Interest rate swap BRL	16,000,000	4,943,348	11.16	3 month Brazilian CDI	1/4/2021	(207,309)
Interest rate swap BRL	5,000,000	1,575,253	11.68	3 month Brazilian CDI	1/4/2021	(34,327)
Interest rate swap BRL	41,800,000	13,347,406	12.06	3 month Brazilian CDI	1/4/2021	(108,685)
Interest rate swap BRL	166,300,000	53,437,955	12.23	3 month Brazilian CDI	1/4/2021	(96,684)
Interest rate swap BRL	17,700,000	5,678,342	12.33	3 month Brazilian CDI	1/4/2021	(19,572)
Interest rate swap BRL	17,100,000	5,628,082	12.85	3 month Brazilian CDI	1/4/2021	123,318
Interest rate swap MXN	99,100,000	6,354,840	5.84	28 day Mexican TIE	9/14/2021	37,952
Interest rate swap MXN	50,900,000	3,223,864	5.63	28 day Mexican TIE	10/11/2021	(21,121)
Interest rate swap MXN	188,400,000	11,936,916	5.66	28 day Mexican TIE	11/9/2021	(72,124)
Interest rate swap MXN	2,900,000	183,475	5.56	28 day Mexican TIE	11/11/2021	(2,174)
Interest rate swap MXN	128,200,000	8,037,828	5.43	28 day Mexican TIE	11/17/2021	(158,522)
Interest rate swap MXN	51,500,000	3,276,787	5.75	28 day Mexican TIE	12/6/2021	(6,471)
Interest rate swap GBP	8,300,000	13,079,066	2.00	6 month LIBOR	3/18/2022	(66,136)
Interest rate swap MXN	600,000	37,455	5.75	28 day Mexican TIE	6/5/2023	(882)
Interest rate swap JPY	1,270,000,000	10,823,373	1.00	6 month JPY LIBOR	9/18/2023	414,975
Interest rate swap JPY	360,000,000	3,065,707	1.00	6 month JPY LIBOR	3/20/2024	115,450
Interest rate swap MXN	30,000,000	1,931,625	7.74	28 day Mexican TIE	5/29/2024	19,658
Interest rate swap MXN	78,000,000	4,952,246	7.41	28 day Mexican TIE	8/2/2024	(18,868)
Interest rate swap MXN	17,000,000	1,062,839	5.98	28 day Mexican TIE	8/26/2024	(23,591)
Interest rate swap GBP	1,300,000	2,045,592	2.08	6 month LIBOR	12/4/2024	9,683
Interest rate swap EUR	19,600,000	21,838,794	1.00	6 month EURIBOR	12/15/2024	217,157
Interest rate swap EUR	4,400,000	4,902,573	1.00	6 month EURIBOR	12/17/2024	48,893
Interest rate swap EUR	1,400,000	1,560,258	0.95	6 month EURIBOR	3/25/2025	27,683
Interest rate swap MXN	60,900,000	3,734,529	5.86	28 day Mexican TIE	3/25/2025	(147,396)
Interest rate swap MXN	100,000,000	6,145,396	5.89	28 day Mexican TIE	3/26/2025	(227,826)
Interest rate swap MXN	19,400,000	1,254,766	6.53	28 day Mexican TIE	6/5/2025	16,530
Interest rate swap MXN	44,900,000	2,864,947	6.36	28 day Mexican TIE	6/9/2025	(1,180)
Interest rate swap MXN	14,100,000	897,186	7.64	28 day Mexican TIE	6/9/2025	(1,438)
Interest rate swap MXN	32,300,000	2,080,487	6.50	28 day Mexican TIE	6/16/2025	21,193
Interest rate swap GBP	1,300,000	2,004,937	2.00	6 month LIBOR	9/16/2025	(39,574)
Interest rate swap USD	4,500,000	4,459,024	2.50	3 month LIBOR	12/16/2025	(40,976)
Interest rate swap MXN	28,000,000	1,793,908	6.77	28 day Mexican TIE	11/29/2029	345
Interest rate swap MXN	7,200,000	422,555	5.99	28 day Mexican TIE	1/8/2030	(37,462)

(continued)

(continued)

Asset Description	Par	Gross Notional	TRS Receives	TRS Pays	Maturity Date	Fair Value 6/30/15
Interest rate swap EUR	3,300,000	\$3,256,006	1.25%	6 month EURIBOR	9/16/2045	(\$420,854)
Interest rate swap EUR	600,000	627,490	1.50	6 month EURIBOR	3/16/2046	(41,030)
<b>Total receive fixed interest rate swaps:</b>		<b>\$540,200,578</b>				<b>(\$1,608,798)</b>
<b>Pay Fixed Inflation-Linked Swaps:</b>						
Inflation swap USD	2,400,000	\$2,408,304	U.S. CPI URNSA	0.07%	12/22/2015	\$8,304
Inflation swap USD	10,300,000	10,141,133	U.S. CPI URNSA	1.56	11/5/2016	(158,867)
Inflation swap USD	37,200,000	36,694,303	U.S. CPI URNSA	1.49	11/19/2016	(505,697)
Inflation swap USD	9,600,000	9,470,678	U.S. CPI URNSA	1.48	11/20/2016	(129,322)
Inflation swap USD	7,800,000	7,696,283	U.S. CPI URNSA	1.47	11/21/2016	(103,717)
Inflation swap USD	500,000	475,261	U.S. CPI URNSA	2.42	2/12/2017	(24,739)
Inflation swap USD	25,400,000	24,065,527	U.S. CPI URNSA	2.25	7/15/2017	(1,334,847)
Inflation swap USD	3,800,000	3,670,131	U.S. CPI URNSA	2.09	10/11/2017	(129,869)
Inflation swap USD	3,000,000	2,874,387	U.S. CPI URNSA	2.21	10/11/2018	(125,613)
Inflation swap EUR	5,000,000	5,658,916	EMU HICP	0.74	1/26/2020	87,916
Inflation swap EUR	4,900,000	5,554,090	EMU HICP	0.71	1/29/2020	94,511
Inflation swap EUR	11,000,000	12,499,595	EMU HICP	0.66	1/30/2020	243,396
Inflation swap EUR	4,500,000	5,103,252	EMU HICP	0.70	1/30/2020	89,353
Inflation swap EUR	20,200,000	22,700,690	EMU HICP	0.99	3/30/2020	193,851
Inflation swap EUR	2,000,000	2,247,881	EMU HICP	0.99	3/31/2020	19,481
Inflation swap USD	18,200,000	16,641,571	U.S. CPI URNSA	2.50	7/15/2022	(1,558,429)
Inflation swap USD	2,100,000	1,921,162	U.S. CPI URNSA	2.56	5/8/2023	(178,838)
<b>Total Pay Fixed Inflation-Linked Swaps:</b>		<b>\$169,823,164</b>				<b>(\$3,513,126)</b>
<b>Receive Fixed Inflation-Linked Swaps:</b>						
Inflation swap USD	15,700,000	\$15,603,706	2.06%	U.S. CPI URNSA	5/12/2025	(\$96,294)
Inflation swap EUR	11,900,000	13,272,848	1.68	France CPI ex-Tobacco Index	6/15/2025	13,869
Inflation swap EUR	4,000,000	4,437,239	1.63	France CPI ex-Tobacco Index	6/18/2025	(19,561)
Inflation swap GBP	4,050,000	6,228,295	3.14	UK Retail Price Index	1/14/2030	(141,141)
Inflation swap GBP	3,200,000	4,909,513	3.19	UK Retail Price Index	4/15/2030	(123,128)
Inflation swap GBP	1,600,000	2,498,260	3.32	UK Retail Price Index	5/15/2030	(18,060)
Inflation swap GBP	5,000,000	7,869,778	3.35	UK Retail Price Index	5/15/2030	(15,373)
Inflation swap GBP	8,010,000	12,624,894	3.40	UK Retail Price Index	6/15/2030	27,563
Inflation swap GBP	6,500,000	9,828,596	3.31	UK Retail Price Index	4/8/2035	(393,957)
Inflation swap GBP	500,000	761,604	3.34	UK Retail Price Index	4/15/2035	(24,746)
Inflation swap GBP	1,000,000	1,528,570	3.36	UK Retail Price Index	4/15/2035	(44,130)
Inflation swap GBP	1,900,000	3,056,225	3.50	UK Retail Price Index	10/15/2044	68,094
Inflation swap GBP	2,010,000	3,290,228	3.55	UK Retail Price Index	11/15/2044	16,854
Inflation swap GBP	1,030,000	1,683,297	3.55	UK Retail Price Index	12/11/2044	-
Inflation swap GBP	184,000	288,126	3.45	UK Retail Price Index	12/15/2044	(1,251)
Inflation swap GBP	400,000	646,838	3.53	UK Retail Price Index	12/15/2044	8,182
Inflation swap GBP	360,000	588,337	3.55	UK Retail Price Index	12/19/2044	-
Inflation swap GBP	60,000	88,635	3.33	UK Retail Price Index	1/12/2045	(5,727)
<b>Total Received Fixed Inflation-Linked Swaps:</b>		<b>\$89,204,989</b>				<b>(\$748,806)</b>

CDI - Cetip Interbank Deposit (interbank lending rate)

CPI - Consumer Price Index

EURIBOR - Euro Interbank Offered Rate

TIIE - Mexico Interbank Equilibrium Interest Rate

CDOR - Canadian Dollar Offered Rate

EMU HICP - European Monetary Union Harmonized Index of Consumer Prices

LIBOR - London Interbank Offered Rate

URNSA - Urban Consumers NSA Index Rate

## DERIVATIVE CREDIT RISK

Credit risk is the possibility that a loss may occur because a party to a transaction fails to perform according to the established terms. In order to eliminate credit risk, derivative securities are traded through a clearing house which guarantees delivery and accepts the risk of default by either party. Derivatives which are exchange traded are not subject to credit risk and are evaluated within the investment risk disclosure.

Non-exchange traded derivative instruments may expose TRS to credit/counterparty risk. TRS investment managers reduce credit risk by evaluating the credit quality and operational capabilities of the counterparties. Because the counterparty risk of a security will fluctuate with market movements, all TRS managers using non-exchange traded derivatives operate a collateral call process ensuring full collateralization of these derivatives. TRS does not have a policy regarding master netting arrangements.

As of June 30, 2015, the aggregate fair value of non-exchange traded derivative instruments in asset positions was \$112,571,439. All applicable futures, options and swaps are in compliance with Dodd-Frank requirements and cleared through the appropriate futures and swaps exchanges. The counterparty risk exposure below is primarily unsettled currency forward contracts. This represents the maximum loss that would be recognized at the reporting date if all counterparties failed to perform as contracted.

### Counterparty Ratings for Non-Exchange Traded Derivatives

Quality Rating	Fair Value at June 30, 2015
Aa1	\$3,959,495
Aa2	7,624,977
Aa3	8,890,414
A1	39,756,255
A2	16,602,334
A3	35,636,917
Baa1	101,047
<b>Total subject to credit risk</b>	<b><u>\$112,571,439</u></b>

Although the derivative instruments held within the TRS investment portfolio are executed with various counterparties, approximately 95 percent of the net market value exposure to credit risk is for non-exchange traded derivative contracts held with 13 counterparties.

## 5. INVESTMENT COMMITMENTS

Investments in certain limited partnerships commit TRS to possible future capital contributions. As of June 30, 2015, TRS had remaining unfunded commitments of \$5,618,165,936 within the real estate, private equity, global fixed income and real return asset classes.

## 6. SCHEDULE OF INVESTMENT RETURNS

For the year ended June 30, 2015, the annual money-weighted rate of return on pension plan investments, net of investment expense, was 4.0 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the timing of cash flows and the changing amounts actually invested.

## E. RESERVES

TRS maintains statutory reserve accounts in accordance with the provisions of 40 ILCS 5/16-101 et seq. In 1997, the Illinois General Assembly passed legislation that allowed the crediting of income at fair value, as opposed to book value, to the Benefit Trust Reserve.

### 1. BENEFIT TRUST

	2015
Balances at June 30	\$46,399,230,247

This reserve serves as a clearing account for TRS income and expenses. The reserve is credited with contributions from the State of Illinois that are not specifically allocated to the Minimum Retirement Annuity Reserve, member and employer contributions, income from TRS invested assets, and contributions from annuitants who qualify for automatic annual increases in annuity.

The reserve accumulates, with 6 percent interest, the contributions by members prior to retirement. Contributions have been 7.5 percent of salary since July 1, 1998. Contributions are fully refundable upon withdrawal from TRS, excluding interest credited thereon. The interest accrued is refundable only in the event of death. Interest is credited as of the date of retirement or death of those retiring or dying during the year and as of the end of the fiscal year for all other members. Interest is computed annually based upon the individual member's balance in the reserve at the beginning of the fiscal year.

This reserve is charged for transfers to the Minimum Retirement Annuity Reserve and all

- refunds to withdrawing members,
- retirement annuity payments (except as provided by the Minimum Retirement Annuity Reserve),
- benefits that are paid to disabled members,
- death benefits paid and
- refunds to annuitants for survivor benefit contributions.

The expected benefit payments do not equal the present value of the reserve. The additional amount needed (the unfunded actuarial accrued liability) as calculated by the actuary was \$62.7 billion in FY15, based on the actuarial value of assets.

## 2. MINIMUM RETIREMENT ANNUITY

	2015
Balances at June 30	\$7,685,346

The minimum annuity is set by law at \$25 per month for each year of creditable service to a maximum of \$750 per month after 30 or more years of creditable service. To qualify, annuitants are required to make a one-time contribution that is credited to the reserve. Interest at 6 percent is credited to the reserve annually based upon the average

reserve balance. The State of Illinois also appropriated funds necessary to pay the minimum benefits. All benefits paid under this program are charged to the reserve. This reserve is fully funded.

## F. OTHER POST-EMPLOYMENT BENEFITS FOR TRS EMPLOYEES

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 towards 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. Employees of the System who retired before January 1, 1998 and are vested in either SERS or TRS do not contribute towards health and vision benefits. A premium is required for dental. For annuitants who retired on or after January 1, 1998, the annuitant's contribution amount is reduced 5 percent for each year of credited service with the State allowing those annuitants with 20 or more years of credited service to not have to contribute towards health and vision benefits. A premium is required for dental. 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.

Public Act 97-0695 was signed into law on June 21, 2012. Effective July 1, 2013, all retirees within state retirement systems began paying a premium for health and vision benefits at a rate determined by CMS. The rate was a percentage of the retiree's annuity and differed depending on whether the retiree was enrolled in Medicare. Due

to an Illinois Supreme Court decision in July of 2014, Public Act 97-0695 was suspended and the collection of premiums was stopped. All premiums collected were refunded during FY15.

The State pays the TRS 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 for 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 for CMS. A copy of the financial statements may be obtained by writing to their office, Department of Central Management Services, 704 Stratton Office Building, Springfield, IL 62706.

## REQUIRED SUPPLEMENTARY INFORMATION

### Schedule of Changes in the Net Pension Liability for Fiscal Years:

	2015	2014
<b>Total pension liability</b>		
Service cost	\$1,948,079,771	\$1,894,351,211
Interest	7,864,916,421	7,561,104,814
Changes of benefit terms	-	-
Difference between expected and actual experience	(90,079,446)	39,950,212
Change of assumptions	1,136,454,886	-
Benefit payments, including refund of member contributions	(5,625,037,173)	(5,320,662,979)
<b>Net change in total pension liability</b>	<u>5,234,334,459</u>	<u>4,174,743,258</u>
<b>Total pension liability - beginning</b>	<u>106,682,654,886</u>	<u>102,507,911,628</u>
<b>Total pension liability - ending (a)</b>	<u><u>\$111,916,989,345</u></u>	<u><u>\$106,682,654,886</u></u>
<b>Plan fiduciary net position</b>		
Contributions - employer	\$145,591,585	\$158,334,598
Contributions - nonemployer contributing entity	3,377,664,945	3,438,382,892
Contributions - member	935,451,049	928,745,853
Net investment income	1,770,549,533	6,782,031,720
Benefit payments, including refund of member contributions	(5,625,037,173)	(5,320,662,979)
Administrative expense	(21,686,860)	(21,218,069)
<b>Net change in plan fiduciary net position</b>	<u>582,533,079</u>	<u>5,965,614,015</u>
<b>Plan fiduciary net position - beginning</b>	<u>45,824,382,514</u>	<u>39,858,768,499</u>
<b>Plan fiduciary net position - ending (b)</b>	<u><u>\$46,406,915,593</u></u>	<u><u>\$45,824,382,514</u></u>
<b>Employers' net pension liability - ending (a) - (b)</b>	<u><u>\$65,510,073,752</u></u>	<u><u>\$60,858,272,372</u></u>

### Schedule of the Net Pension Liability for Fiscal Years:

	2015	2014
Total pension liability	\$111,916,989,345	\$106,682,654,886
Plan fiduciary net position	46,406,915,593	45,824,382,514
Net pension liability	<u>\$ 65,510,073,752</u>	<u>\$60,858,272,372</u>
Plan fiduciary net position as a percentage of the total pension liability	41.5%	43.0%
Covered-employee payroll	\$9,641,170,627	\$9,512,809,680
Net pension liability as a percentage of covered-employee payroll	679.5%	639.8%

### Schedule of Investment Returns for Fiscal Years:

	2015	2014
Annual money-weighted rate of return, net of investment expense	4.0%	17.4%

Note: Information is not available prior to 2014. Additional years will be added to future reports as schedules are intended to show 10 years of historical data.

**Schedule of Contributions from Employers and Other Contributing Entities  
Last 10 Fiscal Years  
(\$ thousands)**

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Actuarially-determined contribution (ADC)	\$4,119,526	\$4,091,978	\$3,582,033	\$3,429,945	\$2,743,221	\$2,481,914	\$2,109,480	\$1,949,463	\$2,052,396	\$1,679,524
Contributions in relation to the actuarially-determined contribution:*										
State	3,376,878	3,437,478	2,702,278	2,405,172	2,169,518	2,079,129	1,449,889	1,039,195	735,515	531,828
Federal & Employer Contributions	144,780	157,228	155,787	153,409	154,150	170,653	151,716	130,578	81,155	69,645
Total contributions	3,521,658	3,594,706	2,858,065	2,558,581	2,323,668	2,249,782	1,601,605	1,169,773	816,670	601,473
Contribution deficiency	\$597,868	\$497,272	\$723,968	\$871,364	\$419,553	\$232,132	\$507,875	\$779,690	\$1,235,726	\$1,078,051
Covered-employee payroll	\$9,641,171	\$9,512,810	\$9,394,741	\$9,321,098	\$9,205,603	\$9,251,139	\$8,945,021	\$8,521,717	\$8,149,849	\$7,765,752
Contributions as a percentage of covered-employee payroll	36.5%	37.8%	30.4%	27.4%	25.2%	24.3%	17.9%	13.7%	10.0%	7.7%

\* Contributions for minimum benefits from the state and for excess sick from employers do not count towards actuarial funding requirements. Beginning in FY08, employer ERO contributions are included because the costs of the ERO program are now included in the actuarial accrued liability. In all years, employer contributions for excess salary increases are included. However, employer contributions for excess sick leave, which also began in FY06, are not included because there is no assumption for excess sick leave and it is not included in the funding requirements. Beginning in FY17, a different basis for determining the actuarially-determined contribution will be used.

## NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

The Schedule of Contributions from Employers and Other Contributing Entities compares actual and actuarially-determined contributions. There is a difference between these amounts because actual contributions are based on state statute under a methodology that does not conform to that used to determine the actuarially-determined contribution.

The following assumptions were used to determine the statutory and actuarially-determined contributions for FY15:

	For Funding per State Statute	For Determining the Actuarially-determined Contribution
Valuation Used to Determine Funding Amount:	June 30, 2013	June 30, 2013
Actuarial Cost Method:	Projected unit credit	Projected unit credit
Amortization Method:	15-year phase-in to a level percent of payroll reached in FY10; then level percent of payroll until a 90 percent funding level is achieved in FY45	Level percent of payroll
Remaining Amortization:	30 years, closed	30 years, open
Asset Valuation Method:	Actuarial value of assets	Actuarial value of assets

## OTHER SUPPLEMENTARY INFORMATION

### Schedule of Administrative Expenses for the Years Ended June 30

	2015	2014
<b>Personnel services</b>		
Salaries	\$10,585,536	\$10,015,342
Retirement contributions	2,361,769	2,223,899
Insurance and payroll taxes	3,519,449	3,648,898
	<u>16,466,754</u>	<u>15,888,139</u>
<b>Professional services</b>		
Actuarial services	272,755	569,979
External auditors	256,961	128,282
Legal services	283,973	446,242
Legislative consulting	84,000	84,000
Information systems consulting	52,883	46,150
Operations consulting	240,070	50,329
Other	6,705	15,040
	<u>1,197,347</u>	<u>1,340,022</u>
<b>Communications</b>		
Postage	144,639	192,065
Printing and copying	199,298	171,855
Telephone	215,442	260,206
	<u>559,379</u>	<u>624,126</u>
<b>Other expenses</b>		
Administrative services	176,684	298,852
Building operations and maintenance	509,740	601,630
EDP supplies and equipment	103,562	164,654
Equipment repairs, rental and maintenance	294,509	286,121
Insurance	385,240	385,017
Memberships and subscriptions	67,672	34,854
Office equipment and furniture	15,628	27,253
Office supplies	26,775	30,422
Software licenses and maintenance	554,341	350,673
Travel, conferences, education	167,951	169,425
	<u>2,302,102</u>	<u>2,348,901</u>
<b>Depreciation expense</b>	<u>1,161,278</u>	<u>1,016,881</u>
<b>Total administrative expenses</b>	<u>\$21,686,860</u>	<u>\$21,218,069</u>

**Schedule of Investment Expenses  
for the Years Ended June 30**

	2015	2014
<b>Investment manager fees</b>	\$267,476,920	\$245,952,483
<b>Master custodian fees</b>		
State Street Bank and Trust Company	1,900,000	1,900,000
<b>Consulting services</b>		
Albourne America, L.L.C.	420,000	151,190
Callan Associates, Inc.	130,500	255,500
Courtland Partners, Ltd.	130,000	-
LP Capital Advisors, L.L.C.	-	65,000
ORG Portfolio Management, L.L.C.	28,500	-
RVK, Inc.	425,000	485,000
Real Asset Portfolio Management, L.L.C.	57,500	55,050
Risk Resources	55,055	67,116
Stout Risius Ross, Inc.	165,000	265,000
TorreyCove Capital Partners, L.L.C.	1,022,500	966,903
<b>Legal services</b>		
Jackson Walker, L.L.P.	330,377	461,456
<b>Tax advisory services</b>		
Ernst & Young, L.L.P.	90,153	66,615
KPMG Limited	7,263	10,621
<b>Other investment expenses</b>		
Private equity expenses	20,418,989	20,343,738
Foreign tax expense	21,400,903	16,100,190
Dividend expense	4,167,917	3,280,099
Investment activity expenses	5,765,606	5,410,584
Personnel costs	4,105,654	3,729,269
Investment analytical systems	677,194	305,129
Auditing costs	107,728	182,438
Education, meetings and travel	98,486	96,231
Research, subscriptions and memberships	16,837	15,061
Other costs	134,960	92,597
<b>Total investment expense</b>	<u>\$329,133,042</u>	<u>\$300,257,270</u>

**Schedule of Professional Services  
for the Years Ended June 30**

	2015	2014
<b>Actuarial services</b>		
Buck Consultants, L.L.C.	\$257,812	\$569,979
The Segal Company Midwest, Inc	14,943	0
	<u>272,755</u>	<u>569,979</u>
<b>External auditors</b>		
Office of the Auditor General	256,961	128,282
<b>Legal services</b>		
Cavanagh & O'Hara	18,537	28,895
Holland & Knight, L.L.P.	222,765	385,311
Howard & Howard Attorneys PC	7,877	7,056
Kopec White & Spooner	19,213	3,027
Loewenstein Hagen & Smith	15,581	18,734
Sorling Northrup	0	3,219
	<u>283,973</u>	<u>446,242</u>
<b>Legislative consulting</b>		
Leinenweber Baroni Daffada, L.L.C.	84,000	84,000
<b>Information systems consulting</b>		
AT&T Global Services, Inc.	320	2,700
Brent Ozar PLF, L.L.C.	0	5,500
CommVault Systems, Inc.	0	9,800
InMage Systems, Inc.	18,688	0
ISI Telemanagement Solutions	400	0
Novanis	28,675	0
CTG, Inc. of Illinois	0	28,150
The Mirazon Group, LLC	4,800	0
	<u>52,883</u>	<u>46,150</u>
<b>Operations consulting</b>		
CEM Benchmarking, Inc.	45,000	0
Darlington Partners, LTD	77,711	0
Graham & Hyde	284	15,094
LRWL, Inc.	55,414	15,123
Management Association	41,661	20,112
Segal Waters Public Sector	20,000	0
	<u>240,070</u>	<u>50,329</u>
<b>Other</b>	<u>6,705</u>	<u>15,040</u>
<b>Total professional services</b>	<u>\$1,197,347</u>	<u>\$1,340,022</u>



**Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards**

RSM US LLP

Honorable William G. Holland  
Auditor General  
Springfield, Illinois

Board of Trustees  
Teachers' Retirement System of the State of Illinois  
Springfield, Illinois

As Special Assistant Auditors for the Auditor General, we have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the Statement of Plan Net Position and Statement of Changes in Plan Net Position of the Teachers' Retirement System of the State of Illinois (System), as of and for the year ended June 30, 2015, and the related notes to the financial statements, and have issued our report thereon dated December 17, 2015.

### **Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the System's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we do not express an opinion on the effectiveness of the System's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies, and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control of the System that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified. We did identify a deficiency in internal control, described in the accompanying schedule of findings as item 2015-001 that we consider to be a significant deficiency.

### **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the System's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

## **Response to Findings**

The System's response to the finding identified in our audit is described in the accompanying schedule of findings. The System's response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on the response.

## **Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

*RSM US LLP*

Schaumburg, Illinois  
December 17, 2015

## Teachers' Retirement System of the State of Illinois

### Schedule of Findings

Year Ended June 30, 2015

---

#### ***Government Auditing Standards***

#### **Finding No. 2015-001 Controls over Census Data**

The Teachers' Retirement System of the State of Illinois (System) has weaknesses in controls over member census data reported by its participating employers.

During testing of the System's internal controls over member census data, it was noted that member census data for the System is accumulated from multiple participating employers which increases the likelihood of errors within the data. During fiscal year 2015 the System's processes and controls for verifying the data relied heavily on the reporting of the information by the participating employers with limited controls in place by the System to verify the member census information.

This issue was initially identified and reported to the System during fiscal year 2014. During fiscal year 2015 the System developed an action plan to address the weaknesses. The System began implementation of certain details of the action plan during fiscal year 2015 with the expectation to implement additional controls in fiscal year 2016. A key control established as part of the action plan includes the System performing on-site employer visits at participating employers in order for the System to substantiate that the key elements of census data reported to the System's actuary are free of material misstatement.

System management is responsible for 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 error or fraud. System controls should encompass effective management processes and controls to sufficiently address the appropriate risks and verify the underlying payroll records of participating employer census data which would include completeness and accuracy of census data. This includes processes and controls over significant elements of census data which originate in multiple locations across the System's participating employers.

The Fiscal Control and Internal Auditing Act (30 ILCS 10/3001) requires all State agencies, including the System, to establish and maintain a system or systems, of internal fiscal administrative controls, such that information is properly recorded and accounted for to permit the preparation of reliable financial and statistical reports.

System management indicated the System did not have procedures to verify census data. The System began implementing new processes and controls over census data during the period and will continue to update and implement new controls moving forward.

Certain financial statement assertions relating to cost-sharing plans (that is, the Total Pension Liability (TPL) and revenues and receivables relating to Contributions) are dependent on the completeness and accuracy of census data. Weaknesses in controls over the significant elements of census data could lead to a misstatement in the valuation of the TPL, a required disclosure in the System's financial statements. In addition, a misstatement could lead to a misstatement in contributions which directly impacts valuation of Plan Net Position and the financial statements of the System directly. A misstatement within the financial statements will impact the calculation of the Net Pension Liability (NPL) as required under GASB statement No. 67 *Financial Reporting for Pension Plans - An Amendment to GASB Statement No. 25*. A misstatement of the NPL will also impact the allocation of the NPL and related pension activity to participating employers under GASB Statement No. 68 *Accounting and Financial Reporting for Pensions - An Amendment of GASB Statement No. 27*. The auditors consider the weaknesses to be a significant deficiency in the System's internal control over financial and fiscal operations. (Finding Code No. 2015-001, 2014-001)

**Teachers' Retirement System of the State of Illinois**

**Schedule of Findings**

**Year Ended June 30, 2015**

---

***Government Auditing Standards***

**Finding No. 2015-001 Controls over Census Data (Continued)**

**Recommendation:**

We recommend the System continue updating and implementing processes and controls to include the verification of the significant elements of census data going forward.

**System Response:**

System management will continue to implement processes and controls to include the verification of the member census data.