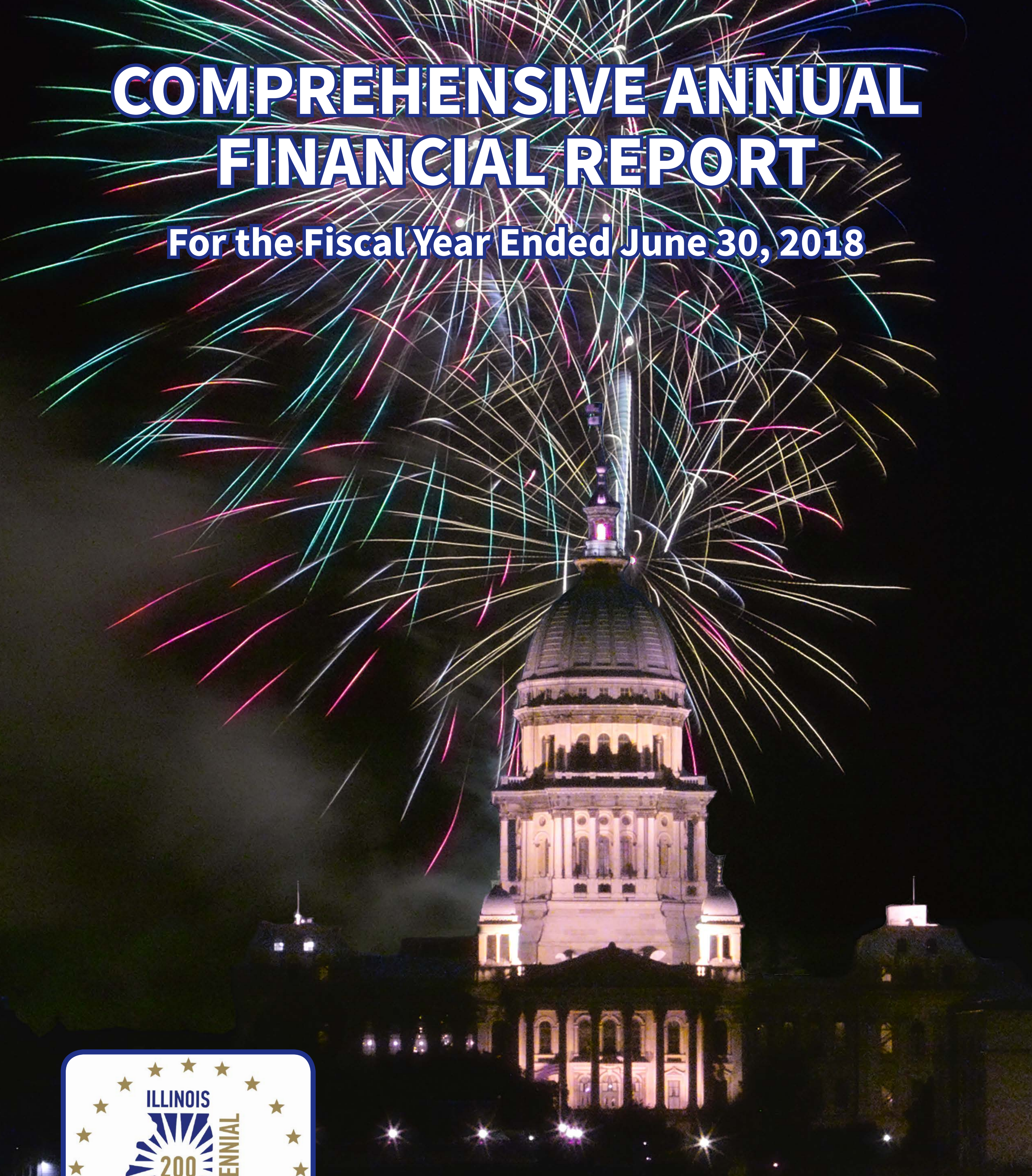
COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Fiscal Year Ended June 30, 2018



ILLINOIS 200 BICENTENNIAL 1818 2018

Teachers' Retirement System of the State of Illinois

a component unit of the State of Illinois

MISSION STATEMENT

TRS will continually deliver the retirement security promised to our members by maintaining the highest and most efficient level of service and by living our values:

- Put the best interest of others first
- Diversity
- Teamwork
- Continuous improvement

FISCAL YEAR 2018 HIGHLIGHTS

	As of June 30, 2018
Active contributing members	160,859
Inactive noncontributing members	134,010
Benefit recipients*	122,423
Total membership	417,292
Investment return	
Total fund investment return, net of fees	8.5%
For funding purposes	
Actuarial accrued liability (AAL)	$127,019,330,164
Less actuarial value of assets (smoothed assets)	51,730,889,960
Unfunded actuarial accrued liability	$75,288,440,204
Funded ratio (% of AAL covered by assets, based on smoothed assets)	40.7%
For financial disclosure	
Total pension liability (TPL)	$129,914,383,296
Less fiduciary net position (FNP)	51,969,546,694
Net pension liability (NPL)	$77,944,836,602
FNP as a percentage of TPL	40.0%
Income	
Member contributions	$938,037,245
Employer contributions	84,633,117
State of Illinois contributions	4,095,125,358
Total investment income	4,049,271,728
Total income	$9,167,067,448
Expenses	
Benefits paid	$6,458,709,645
Refunds paid	92,924,731
Administrative expenses	21,550,896
Total expenses	$6,573,185,272

** Benefit recipients includes retiree, disability and survivor benefit recipients.*

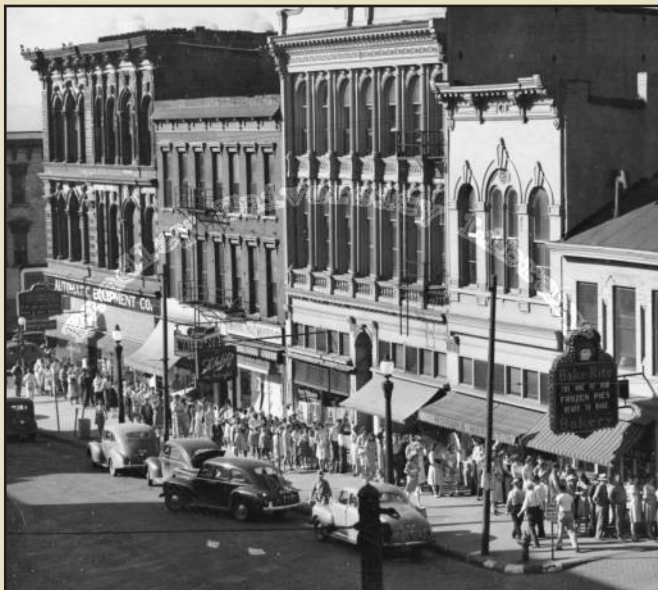
Cover photo credit: Kimberly Blom-Roemer, www.r2-photography.com

PREFACE

COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE FISCAL YEAR ENDED JUNE 30, 2018

This report was prepared by the TRS Accounting, Investments, Research and Communications Departments.



CITY OF PEORIA, PAST

CITY OF PEORIA, PRESENT

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF ILLINOIS

a component unit of the State of Illinois

2815 West Washington | P.O. Box 19253 | Springfield, Illinois 62794-9253 | https://www.trsil.org

In 2018, Illinois celebrates 200 years of statehood. Two centuries of significant contributions to the United States and the world – a leader in commerce, agriculture, industry, transportation, learning, culture and the arts.

Illinois' dedication to the education of its youth has been interwoven throughout history. The lessons learned in classrooms all over the state from 1818 on have blossomed again and again to advance the human condition in innumerable ways.

The daughters and sons of Illinois have been innovators and explorers, creators of beauty, champions of the oppressed and defenders of freedom. Presidents, poets, astronauts, inventors and musicians have emerged from one-room rural schools and urban classrooms. When called to defend liberty at home or abroad, Illinoisans have responded with courage and sacrifice. And to be fair, our state, like any other, also has seen its share of conflict, lawlessness and destruction.

In the pages of this Comprehensive Annual Financial Report *for fiscal year 2018, the Teachers' Retirement System honors the bicentennial of Illinois and its people by noting some of the key historical moments – good and bad – that have shaped the Prairie State.*

Happy birthday, Illinois.

ILLINOIS

TABLE OF CONTENTS

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INTRODUCTION

LANDMARKS & MILESTONES

1818 - Illinois became the 21st state, with the first capitol at Kaskaskia.

1818 – The population of Illinois was 34,620.

1818 – Alton incorporated as a town.

1818 – Edwardsville, settled in 1805, incorporated as a town.

1819 – Vandalia incorporated as a town.

1819 – Belleville, settled in 1814, incorporated as a town.

1820 – The General Assembly moved the state capital to Vandalia.

1826 – Galena, settled in 1821, was founded.

1830 – Macomb incorporated as a town.

1833 – Chicago, settled in the 1780s, incorporated as a town.

1833 – Urbana, settled in 1822, incorporated as a town.

1835 – Peoria, settled in 1680, incorporated as a town.

1837 – The General Assembly moved the state capital to Springfield.

1837 – Galesburg incorporated as a town.

1839 – Rockford, settled in 1834, incorporated as a town.

1840 – Springfield, settled in 1810, incorporated as city.

1850 – The population of Illinois was 851,470.

1852 – Carbondale founded.

1855 – Champaign founded.

1866 – The Grand Army of the Republic was founded in Decatur.

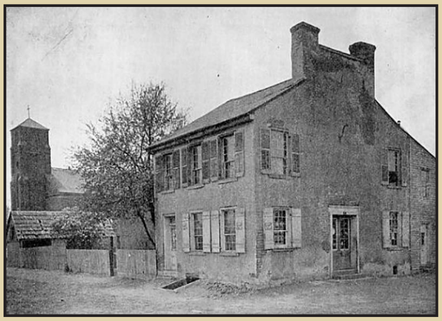
1900 – The population of Illinois was 4,821,550.

1950 – The population of Illinois was 8,712,176.

2000 – The population of Illinois was 12,419,293.

2015 – The population of Illinois was 12,859,995.

2017 – The population of Illinois was 12,802,023.



First State Capitol in Kaskaskia

Second State Capitol in Vandalia

State Capitol in Springfield

Third State Capitol in Springfield


2012
2013
2014
2015
2016
2017
GOVERNMENT FINANCE OFFICERS ASSOCIATION
Certificate of Achievement
for Excellence
in Financial Reporting
Presented to
Teachers' Retirement System
of the State of Illinois
Executive Director / CEO

PPCC

Public Pension Coordinating Council

Recognition Award for Administration
2018

Presented to

Teachers' Retirement System of the State of Illinois

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

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle

Alan H. Winkle
Program Administrator

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF ILLINOIS
2815 West Washington Street | P.O. Box 19253 | Springfield, Illinois 62794-9253
Richard W. Ingram, Executive Director
http://www.trsil.org
877-927-5877 (877) 9-ASK-TRS

LETTER OF TRANSMITTAL

Dec. 13, 2018

To the TRS Board of Trustees and TRS Members:

We are pleased to present the *Comprehensive Annual Financial Report* (CAFR) for the Teachers' Retirement System of the State of Illinois (TRS) for the fiscal year ended June 30, 2018. This report details the on-going work of the System's trustees, administrators and staff to fulfill our mission and keep the retirement promises made by the State of Illinois to educators in its public schools. This Letter of Transmittal explains the current realities that threaten that mission and what is needed to avert these threats.

As in the past, TRS met its responsibilities during FY18 with an absolute commitment to the highest quality service to its members and their families and employers. The System continued its dedication to accountability and transparency as well as a resolve to overcome all challenges.

- TRS distributed more than $6.5 billion in retirement, disability and survivor benefits to more than 122,000 annuitants and beneficiaries.

- The successful delivery of TRS pensions generated a $6.6 billion economic stimulus in every corner of Illinois. Approximately $4.5 billion of TRS retirement benefits stay in Illinois, supporting more than 45,000 jobs with a payroll of $1.9 billion.

- TRS investments earned a positive 8.5 percent return, net of fees, for the fiscal year, which exceeded the System's custom benchmark. The portfolio's average 9.2 percent annual return for the past 40 years exceeded the long-term actuarial return assumption of 7 percent.

However, the successes of TRS and the positive effects of member benefits throughout Illinois are overshadowed by the System's marginal financial condition. While we have substantial assets, the fiscal health of the Teachers' Retirement System is exposed to any future economic downturn. It would not take a significant change in current conditions to put TRS on a path towards significant difficulty.

As of June 30, 2018, TRS is 40.7 percent funded and carries a $75 billion unfunded liability. The System has $51.7 billion in assets and a long-term benefit obligation of $127 billion. In other words, TRS currently holds just 40 cents for every $1 it owes to all members.

Our first priority is to pay our member benefits and closely manage the liquidity of our portfolio to ensure that we have the cash needed to meet our obligations. The TRS funded ratio is at a level where the System's investment strategy could be negatively impacted by a future downturn in the investment markets. Most experts predict that a market "correction," or downturn, is much more likely in the near future than a continued "up trend." A well-funded plan has the capacity to absorb "down years." A plan like TRS with a funded ratio already below 50 percent would be unable to absorb any financial shocks created by a sustained downturn in the markets.

Despite long-term investment returns that exceed expectations, the investment of TRS assets alone will never generate enough money to overcome the unfunded liability. If the funded ratio were to drop further, the portfolio would need to become more liquid and our investments more conservative in order to have ready access to the cash necessary to fund an expanding benefit payroll. Because of these strategic changes, expected returns would fall, making the funding challenge even greater.

The biggest reason for the huge TRS unfunded liability is decades of underfunding by state government. Since 1939, Illinois officials have never once set aside enough money to “fully fund” the pension promises to be paid by TRS. As a result, 75 percent of the $4.09 billion Illinois taxpayers allocated for teacher pensions in FY18 was dedicated to paying for prior funding shortfalls, not the actual cost of benefits. If pensions had been properly funded over the last 80 years, the FY18 state appropriation for TRS would have been $1.05 billion and our future would be more secure.

Unfortunately, Illinois law mandates every year that TRS and the state’s other pension systems are continually underfunded. The formula used to develop state government’s annual contribution to its pension systems, as dictated in the pension code, artificially lowers the state’s cost of funding pensions. In FY18, the state contribution to TRS calculated by the formula in state law was $4.09 billion. Using actuarial calculations that are standard across the country, Illinois’ contribution to TRS in FY18 would have been $6.99 billion.

The statutory pension funding formula in Illinois diverges from several generally-accepted actuarial funding standards.

- The funding formula is back end loaded.
- The state’s long-term goal is a 90 percent funded ratio. The standard goal is 100 percent.
- The state’s annual contribution is reduced each year by the amount of debt service needed to pay off pension obligation bonds sold more than a decade ago to finance the state’s annual contribution.
- The state’s funding plan covers 50 years, when the standard practice is to amortize over 30 years but use an even shorter period for a severely underfunded plan.
- Future savings from reductions in retiree benefits are counted now before they are actually realized. In standard practice, savings from a reduction in the benefit structure are not counted until they happen.

We hope that future investment climate remains stable and we will work with the state to find a way to support sound financial funding for TRS and the other state pension systems.

Historically, TRS has relied on the belief that the state will stick to a 23-year-old statutory funding plan for TRS and the other public pension systems that requires state government to allocate enough money annually to eliminate most of the systems’ unfunded liabilities over time. This statutory plan mathematically brings TRS to 90 percent funding in 2045.

However, hope is not a reliable strategy and a sustainable funding solution has yet to emerge. Circumstances where pension contributions represent more than 20 percent of the state’s budget likely are not sustainable. A disclosure the state included in recent bond offering documents acknowledges that there could be “no assurance” that the state could meet its future obligations.

In the years ahead, we look forward to working with the new administration and legislative leaders to develop a sustainable solution to our chronic underfunding. Our members and many stakeholders deserve a serious effort to secure the future of TRS.

PROFILE OF TRS

TRS was established by the State of Illinois on July 1, 1939 to provide retirement, disability and death benefits to teachers employed by Illinois public elementary and secondary schools outside the city of Chicago. A 13-member board of trustees governs TRS. The board includes the state superintendent of education, six representatives of the public who are appointed by the governor, four members of TRS who are elected by active teachers and two retired members who are elected by annuitants. The TRS Board of Trustees appoints the executive director, who is responsible for the effective administration of TRS.

The annual budget for TRS administrative expenses is prepared by staff and approved by the TRS Board of Trustees. The TRS annual operating budget request is prepared in conjunction with a review of the long-range strategic plan.

FINANCIAL INFORMATION

Our staff issues a CAFR within six months of the close of each fiscal year. The report contains financial statements presented in conformity with generally accepted accounting principles (GAAP) applied within guidelines established by the Governmental Accounting Standards Board (GASB).

A system of internal controls helps us monitor and safeguard assets and promote efficient operations. Each year TRS's financial statements, records and internal controls are examined by a professional accounting firm that serves as a special assistant auditor employed by the Illinois Auditor General. In addition, an annual compliance attestation examination is performed to review compliance with applicable statutes and codes. The Independent Auditor's Report on TRS's financial statements is included on pages 18 and 19 in the Financial Section of this report. TRS received an unmodified auditor opinion on the fair presentation of its financial statements.

TRS is required by law to publish a CAFR annually with information about the System's financial condition, investment methods, performance and actuarial conclusions that determine financial needs as well as statistical information about members, school districts, revenues and benefits. TRS management and staff are responsible for the accuracy of this report and for ensuring that all material disclosures have been made. TRS recognizes that the limitations of internal controls must be considered. These controls are designed to provide reasonable assurance regarding the safekeeping of assets, the reliability of financial records, the appropriate segregation of duties and responsibilities and the use of sound accounting and financial practices. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived and that the valuation of costs and benefits requires estimates and judgments by management. The objective of internal controls at TRS is a reasonable, not absolute, assurance that the System's financial statements are free of material misstatements. Three internal auditors are employed to continually review and determine that all laws, rules, policies and procedures are followed.

Generally accepted accounting principles require that management provide a narrative introduction, overview and analysis to accompany the financial statements in the form of a Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement and should be read in conjunction with the MD&A, which can be found immediately following the report of the independent auditors.

REVENUES AND EXPENSES

The three sources of TRS funding are member contributions, investment income and employer contributions through state appropriations and payments by employers. TRS expenses include payments of benefits, refunds and administrative expenses. Negative amounts are shown in parentheses () throughout this report.

Revenues ($ millions)

Source	2018	2017	Increase/(Decrease) Amount	% Change
Member contributions	$938	$929	$9	1.0%
State of Illinois	4,095	3,986	109	2.7
Employer contributions	85	149	(64)	(43.4)
Total investment income	4,049	5,521	(1,472)	(26.6)
Total	**$9,167**	**$10,585**	**($1,418)**	**(13.4)%**

Expenses ($ millions)

	2018	2017	Increase/(Decrease) Amount	% Change
Benefits payments	$6,459	$6,153	$306	5.0%
Refunds	93	285	(192)	(67.4)
Administrative/ other	21	23	(2)	(5.2)
Total	**$6,573**	**$6,461**	**$112**	**1.7%**

The TRS Board of Trustees and staff remain vigilant in our efforts to improve the retirement system's funded status for current and future members. We continue to invest prudently and in a disciplined manner for the benefit of our membership and for the long-term success of the retirement system. The TRS board and staff believe the overall investment strategy remains sound and appropriate for our circumstances.

INVESTMENTS

The TRS investment portfolio returned 8.5 percent, net of fees, for the fiscal year ended June 30, 2018. Total investment assets increased approximately $2.9 billion during the year.

The TRS trust fund is invested under the authority of the Illinois Pension Code and follows the "prudent person rule," which requires investments to be managed solely in the interest of fund participants and beneficiaries. The TRS Investment Policy guides TRS's investments. Investment principles include preserving the long-term principal of the trust fund, maximizing total return within prudent risk parameters and acting in the exclusive interest of TRS members.

The Investment Section of this report contains a summary of the portfolio and investment activities. Pages 83 to 86 provide specific details regarding fees and commissions and a list of investment professionals who provided services to TRS.

FUNDING

During the year ended June 30, 2018, the funded ratio based on the actuarial value of assets of the Teachers' Retirement System increased to 40.7 percent from its June 30, 2017 level of 40.2 percent. The actuarial value of assets at year end was $51.7 billion and the actuarial accrued liability was $127.0 billion. Under the smoothing methodology required by Public Act 96-0043, differences between actual and expected investment earnings are recognized prospectively over a five-year period.

The Actuarial Section of this report contains the actuary's letter and further information on funding.

MAJOR INITIATIVES AND ACCOMPLISHMENTS

SERVICE TO MEMBERS AND EMPLOYERS

During the year, more than 32,000 member claims were processed and approximately 155,000 telephone calls were received or made to conduct business. The average wait time for an incoming telephone call to the TRS Call Center was reduced during the year from 171 seconds to 51 seconds. Email traffic with members totaled almost 30,000. The counseling staff scheduled 4,731 appointments, including more than 900 "walk-ins." The member outreach staff participated or hosted more than 100 meetings with a total attendance in excess of 3,000 members and stakeholders. The Member Service Department implemented "post-counseling surveys" and recorded a 99 percent satisfaction rate with a TRS counselor and the appointment. TRS operational costs remain $3 below the peer average while service scores continue moving towards the peer average, according to CEM Benchmarking, Inc.

COMMITMENT TO DIVERSITY

TRS continues to strengthen its existing commitment to diversity within the management of its $52.1 billion investment portfolio. Through the end of FY18, 19.9 percent of the overall TRS investment portfolio was overseen by 32 Women/Minority Business Enterprise (WMBE) investment managers, with assets totaling $10.34 billion. The participation goal for the fiscal year was 18 percent and TRS exceeded its goal for assets under WMBE management by more than $1 billion.

TRS also seeks to increase diversity among vendors providing administrative goods and services. At the end of FY18, 26.3 percent of expenditures subject to the goal were paid to business enterprise vendors. This far exceeded the FY18 goal of 10 percent. TRS reviews the target goal each fiscal year.

GEMINI – PENSION ADMINISTRATION SYSTEM

This initiative is a complete rewrite of the TRS pension administration system (PAS) and is central to the future success of TRS. Our goal is a system that delivers our members' retirement benefits efficiently, effectively and with the best possible level of service. The current system, which goes by the acronym STAR (Serving Teachers and Retirees), has been in use since 2003. STAR has been reworked many times and is nearing the end of its operational life. The more technology advances, the more antiquated STAR becomes.

TRS has named the next-generation system GEMINI, which continues the celestial theme of STAR but without an acronym that ultimately fades into the background. Gemini will be developed in-house with the Agile methodologies TRS has been using in project development since 2017.

COMMITMENT TO CYBERSECURITY

At TRS, the TRS Board of Trustees and staff understand that it is imperative for the System to keep the private information of 417,000 men, women and their families as well as 990 employers as safe and secure as possible and to implement practices and systems that guard against growing cybersecurity threats.

The System trains all staff not only to identify suspicious emails or potential cyberattacks, but also in methods to keep member information secure because there is no "perfect protection." TRS requires its staff to participate in periodic "awareness training" that highlights threats through real world examples and interactive sessions. TRS follows industry "best practices" for cybersecurity to help reduce our potential exposure to a damaging "cyber incident."

DIGITAL RECORD CONVERSION

The goal of this multi-year initiative is to convert all of the System's paper records to a digital format in order to improve the security of the data and make the records easier to use. At the end of FY18, more than 85 percent of the member record back-file conversion was complete. There are approximately 56,000 records remaining before all existing member records are digitized. There are approximately 9 million images in the Member Services repository and it is more than 11 terabytes in size.

REBOOTING THE TRS DIGITAL AND TELECOMMUNICATIONS PLATFORMS

Following evaluations and input from all TRS departments, TRS members, TRS stakeholders and peer systems, TRS launched a reimagined public website at **https://www.trsil.org** designed to help visitors accomplish tasks and find information relevant to their needs.

In the same time frame, TRS also successfully completed two transitions that affected all external System communications: a new ".org" domain from ".gov," which necessitated new email addresses for all staff and a new telecommunications provider that required new telephone numbers for TRS. Both transitions improved the flexibility of the systems and enabled TRS to better control costs.

ENHANCED DEATH VERIFICATION COORDINATION

To combat potential fraud and abuse, TRS regularly checks available public records in an effort to identify or verify the deaths of members that have not been voluntarily reported to the System by surviving relatives. In FY18, TRS augmented its existing processes by initiating a first-ever data exchange with the Illinois Department of Public Health. In the first month of the exchange, TRS was able to identify an additional 12 deceased members and recoup approximately $700,000 in overpayments.

AWARDS

CERTIFICATE OF ACHIEVEMENT FOR EXCELLENCE IN FINANCIAL REPORTING

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to TRS for its *Comprehensive Annual Financial Report* for the fiscal year ended June 30, 2017. This was the 29th consecutive year that the System has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government or government entity must publish an easily readable and efficiently organized *Comprehensive Annual Financial Report*. This report must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. We believe that our current *Comprehensive Annual Financial Report* continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

PUBLIC PENSION COORDINATING COUNCIL (PPCC), RECOGNITION AWARD FOR ADMINISTRATION

TRS received the Recognition Award for Administration in 2018 for meeting professional standards of plan administration as set forth in the Public Pension Standards of the PPCC. The award is presented by the PPCC, a confederation of the National Association of State Retirement Administrators (NASRA), the National Conference on Public Employee Retirement Systems (NCPERS) and the National Council on Teacher Retirement (NCTR).

ACKNOWLEDGMENTS

Information for this report was gathered by TRS staff under the leadership of the TRS Board of Trustees and the executive director and it is the responsibility of TRS management. It is intended to provide complete and reliable information as a basis for making management decisions, to determine our compliance with legal provisions and as a means of determining responsible stewardship of the assets contributed by members, their employers and the State of Illinois.

This report is made available to members of the General Assembly, participating employers and to other interested persons by request. The participating employers of TRS form a link between TRS and its members. Their cooperation contributes significantly to our success. We hope all recipients of this report find it informative and useful. This report is also available to the general public on our website, **https://www.trsil.org**.

We would like to take this opportunity to express our gratitude to staff, professional consultants and others who have worked so diligently to ensure TRS's successful operation.

Richard Ingram
Executive Director

Jana Bergschneider, CPA
Chief Financial Officer

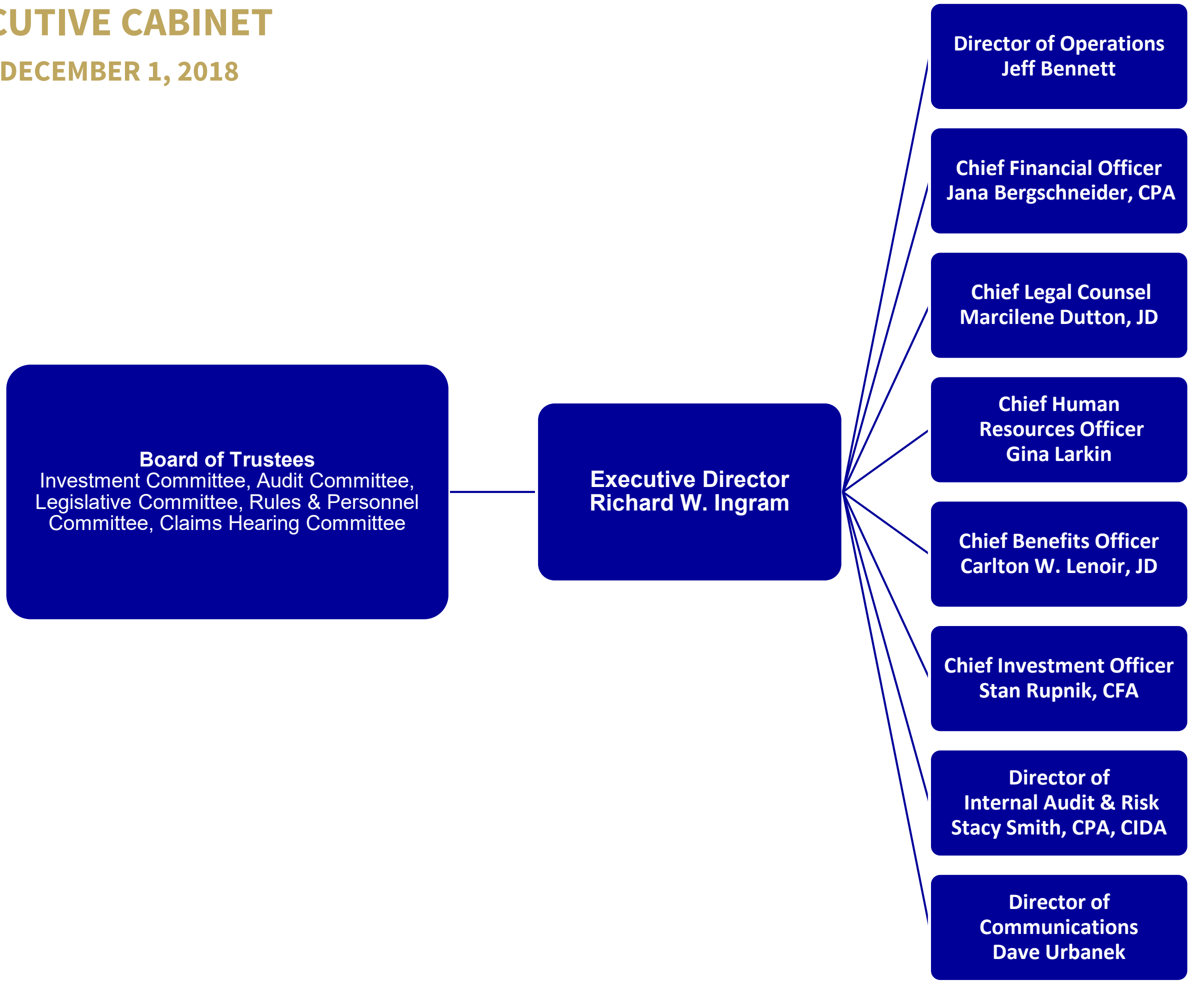
TRS BOARD OF TRUSTEES

AS OF DECEMBER 1, 2018

TRS ORGANIZATION

EXECUTIVE CABINET

AS OF DECEMBER 1, 2018



Standing, left to right:
Director of Communications Dave Urbanek, Chief Human Resources Officer Gina Larkin, Chief Investment Officer Stan Rupnik, Executive Director Dick Ingram, Chief Benefits Officer Carlton Lenoir, Director of Operations Jeff Bennett and Chief Financial Officer Jana Bergschneider
Sitting, left to right:
Director of Internal Audit and Risk Stacy Smith and Chief Legal Counsel Marcilene Dutton

CONSULTING AND PROFESSIONAL SERVICES

ACTUARY

The Segal Company Midwest, Inc.

EXTERNAL AUDITORS

(Special assistants to the Office of the Auditor General)

BKD, L.L.P.

LEGAL SERVICES

Bruce Bonczyk Law Office

Cavanagh & O'Hara

DLA Piper, L.L.P.

Holland & Knight, L.L.P.

Howard & Howard Attorneys, P.L.L.C.

Kopec White & Spooner

Loewenstein & Smith, P.C.

Jackson Walker, L.L.P.

Reinhart Boerner Van Deuren

Whitt Law, L.L.C.

LEGISLATIVE CONSULTING

Leinenweber Baroni & Daffada Consulting, L.L.C.

INFORMATION TECHNOLOGY

Advanced Design Management Group, L.L.C.

Agile Progress, L.L.C.

Capitol Strategies Consult, Inc.

HSO Corporation

ProCircular, Inc.

Promet Solutions Corporation

Sentinel Technologies, Inc.

OPERATIONS

CEM Benchmarking, Inc.

Darlington & Company, Inc.

Graham & Hyde

Higher Logic, L.L.C.

Jasculca Terman Strategic Communications

Levi Ray & Shoup, Inc.

Management Association

SABA Software

Segal Waters Public Sector

INTERNAL AUDIT

Investment Training & Consulting Institute, Inc.

MASTER TRUSTEE

State Street Bank and Trust Company

SECURITIES LENDING AGENT

Citibank, N.A.

INVESTMENT CONSULTANTS

Albourne America, L.L.C. *(Diversifying strategies)*

Stepstone Group Real Estate, L.P. *(Real estate)*

RVK, Inc. *(General investment)*

TAVE & Associates, L.L.C. *(Insurance brokerage services)*

TorreyCove Capital Partners, L.L.C. *(Private equity)*

CO-INVESTMENT ADVISORS

Caledon Capital Management, Inc. *(Private equity)*

ORG Portfolio Management, L.L.C. *(Real estate)*

Real Asset Portfolio Management, L.L.C. *(Real estate)*

Stout Risius Ross, Inc. *(Private equity)*

TorreyCove Capital Partners, L.L.C. *(Private equity)*

SECONDARY MARKET ADVISORS

Park Hill Group, L.L.C.

GOVERNMENT & POLITICS

1824 – A constitutional amendment to make slavery legal in Illinois is rejected by voters.

1848 – Second Illinois Constitution is ratified.

1858 – During their contest for the U.S. Senate, Stephen A. Douglas and Abraham Lincoln held seven debates throughout Illinois. Douglas was victorious.

1860 – Abraham Lincoln of Springfield was elected the 16th president of the United States. He was re-elected in 1864.

1868 – Ulysses S. Grant, a former resident of Galena, was elected president of the United States. He was re-elected in 1872.

1870 – Third Illinois Constitution was ratified.

1888 – Melville W. Fuller of Chicago is named chief justice of the United States Supreme Court.

1892 – Adlai Stevenson I of Bloomington was elected vice president of the United States.

1903 – Joseph G. Cannon of Danville was elected speaker of the U.S. House of Representatives.

1925 – Charles Gates Dawes of Evanston was elected vice president of the United States and won the Nobel Peace Prize for the “Dawes Plan” to restore the German economy after World War 1.

1959 – Everett M. Dirksen of Pekin was elected Republican leader of the U.S. Senate.

1968 – Massive protests and civil disorder, sparked by the Vietnam War, erupted in Chicago during the Democratic National Convention.

1970 – Illinois’ fourth state constitution was ratified.

1980 – Ronald Regan, born in Tampico, was elected president of the United States. He was re-elected in 1984.

1992 – Carol Moseley-Braun of Chicago was the first African-American woman elected to the United States Senate.

1999 – J. Dennis Hastert of Yorkville was elected speaker of the U.S. House of Representatives.

2008 – Barack Obama of Chicago was elected president of the United States and he was re-elected in 2012. He was the first African-American elected to the office.

President
Ulysses S. Grant

President Barack Obama

President
Ronald Reagan

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FINANCIAL

ECONOMY, BUSINESS & TRANSPORTATION

1821 – Illinois chartered a state bank in Vandalia.

1823 – Galena became a national center for lead mining.

1836 – Work began on the Galena and Chicago Union Railroad and it is finished in 1848.

1837 – In Grand Detour, John Deere designed and created the self-scouring steel plow, the beginning of an international business now based in Moline.

1839 – The “National Road” from Cumberland, Maryland to Vandalia, was completed.

1848 – The Illinois and Michigan Canal was completed, linking the Great Lakes with the Illinois and Mississippi rivers.

1848 – The Chicago Board of Trade was founded.

1856 – The Illinois Central Railroad between Chicago and Cairo was completed.

1872 – Chicago-based Montgomery Ward produced the first mail-order catalogue.

1874 – Joseph Glidden, a DeKalb farmer, was granted a patent for barbed wire.

1884 – The world’s first skyscraper – the 10-story Home Insurance Building, was built in Chicago.

1893 – Sears, Roebuck and Company was founded in Chicago.

1894 – William Hooker of Abingdon was awarded a patent for the spring-loaded mousetrap.

1900 – Engineers reversed the natural course of the Chicago River so it flows west out of Lake Michigan.

1901 – The first Walgreen’s drug store was opened in Chicago.

1905 – Rotary International was founded in Chicago as The Rotary Club.

1909 – A coal mine fire in Cherry resulted in 259 deaths – one of the worst mine disasters in history.

1922 – State Farm Insurance Company was founded in Bloomington.

1926 – U.S. Route 66, connecting Chicago and Los Angeles, was completed.

1949 – Orchard Place Airport on the outskirts of Chicago was renamed O’Hare Field and later O’Hare International Airport.

1955 – The first McDonald’s fast-food restaurant was opened in Des Plaines.

1973 – The cellular telephone was invented in Schaumburg by Motorola’s Martin Cooper.

BKD
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Independent Auditor's Report

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

Report on the Financial Statements

As Special Assistant Auditors for the Auditor General, we have audited the accompanying Statement of Fiduciary Net Position of the Teachers' Retirement System of the State of Illinois (System), a component unit of the State of Illinois, as of June 30, 2018, and the Statement of Changes in Fiduciary Net Position for the year then ended, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

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

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the System as of June 30, 2018, and the changes in fiduciary 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 Statements No. 67, is dependent on several assumptions including the assumption that future required contributions from all sources are made based on statutory requirements in existence as of the date of this report. These assumptions are discussed in Note A.6 of the financial statements. 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 management's discussion and analysis, the schedule of changes in the net pension liability, the schedule of net pension liability, the schedule of contributions from employers and other contributing entities, the schedule of investment returns, and notes to required supplementary information as listed in the table of contents be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit for the year ended June 30, 2018 was conducted for the purpose of forming an opinion on the System's basic financial statements. The other supplementary information in the financial section and the accompanying introduction, investments, actuarial, and statistical sections, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The other supplementary information in the financial section, as listed in the table of contents, has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplementary information in the financial section, as listed in the table of contents, is fairly stated, in all material respects, in relation to the basic financial statements as a whole for the year ended June 30, 2018.

We have also previously audited, in accordance with auditing standards generally accepted in the United States of America, the System's basic financial statements as of and for the year ended June 30, 2017 (not presented herein), and have issued our report thereon dated December 12, 2017 which contained an unmodified opinion on those financial statements. The other supplementary information in the financial section, as listed in the table of contents, for the year ended June 30, 2017 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the June 30, 2017 financial statements. The other supplementary information in the financial section, as listed in the table of contents, have been subjected to the auditing procedures applied in the audit of the June 30, 2017 basic 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 in the financial section, as listed in the table of contents, is fairly stated in all material respects in relation to the basic financial statements as a whole for the year ended June 30, 2017.

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

BKD, LLP

Decatur, Illinois
December 13, 2018

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, 2018. Please read it in conjunction with the Letter of Transmittal in the Introduction Section on page 6 and the Financial Statements and related notes that follow this discussion.

FINANCIAL HIGHLIGHTS

- The net position of TRS at June 30, 2018 was $52.0 billion.
- During FY18, the net position of TRS increased $2.6 billion.
- Contributions from members, employers and the State of Illinois were $5.1 billion, an increase of $53 million or 1.0 percent for FY18.
- Total net investment income was $4.0 billion, compared to $5.5 billion in FY17, a decrease of $1.5 billion.
- Benefits and refunds paid to members and annuitants were $6.6 billion, an increase of $114 million or 1.8 percent.
- The actuarial accrued liability was $127.0 billion at June 30, 2018.
- The unfunded actuarial accrued liability was $75.3 billion at June 30, 2018. The funded ratio was 40.7 percent at June 30, 2018. 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 $129.9 billion at June 30, 2018.
- The net pension liability was $77.9 billion at June 30, 2018. The plan fiduciary net position, as a percentage of total pension liability, was 40.0 percent.

The Financial Statements contained in this section of the *Comprehensive Annual Financial Report* consist of:

Statement of Fiduciary Net Position. This statement reports the pension trust fund's net position which represents the difference between the financial 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, 2018.

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 additions and deductions to net position 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 supplementary 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

	2018	Percentage Change	2017
Cash	$32,034,294	(16.4%)	$38,331,642
Receivables and prepaid expenses	5,856,758,011	(41.8)	10,059,591,696
Investments	52,070,945,762	5.9	49,180,275,900
Invested securities lending collateral	2,323,876,849	(28.9)	3,268,211,165
Capital assets	2,851,122	(2.1)	2,913,530
Total assets	**60,286,466,038**	**(3.6)**	**62,549,323,933**
Total liabilities	**8,316,919,344**	**(36.9)**	**13,173,659,415**
Net position restricted for pensions	**$51,969,546,694**	**5.3%**	**$49,375,664,518**

CONDENSED COMPARATIVE STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEARS ENDED JUNE 30

	2018	Percentage Change	2017
Contributions	$5,117,795,720	1.0%	$5,064,989,441
Net investment income	4,049,271,728	(26.6)	5,520,453,001
Total additions	9,167,067,448	(13.4)	10,585,442,442
Benefits and refunds	6,551,634,376	1.8	6,438,005,920
Administrative expenses	21,550,896	(5.2)	22,728,735
Total deductions	6,573,185,272	1.7	6,460,734,655
Net increase in net position	**2,593,882,176**	**(37.1%)**	**4,124,707,787**
Net position restricted for pensions - beginning of year	**49,375,664,518**	**9.1**	**45,250,956,731**
Net position restricted for pensions - end of year	**$51,969,546,694**	**5.3%**	**$49,375,664,518**

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 $52 billion at June 30, 2018.

CONTRIBUTIONS

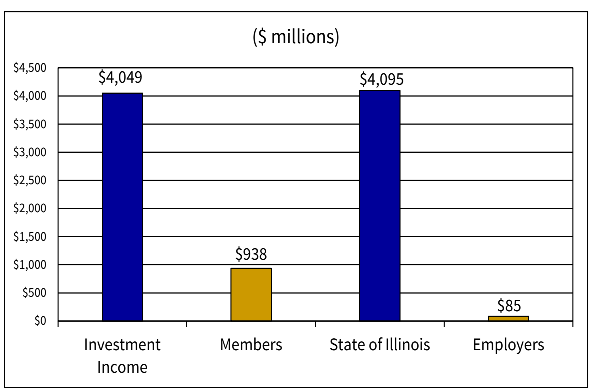
Contributions increased $52.8 million during FY18. During FY18, contributions from the State of Illinois increased $109 million and employer contributions from school districts decreased $65 million.

The increase in State of Illinois FY18 appropriations was primarily due to a reduction in the investment return assumption adopted in the June 30, 2016 actuarial valuation.

Public Act 100-0023 requires that the impact on state contributions due to changes in actuarial assumptions be phased in over five years, lowering the increase in the FY18 state contribution that would have otherwise occurred.

State funding law provides for a 50-year funding plan that includes 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, 2018

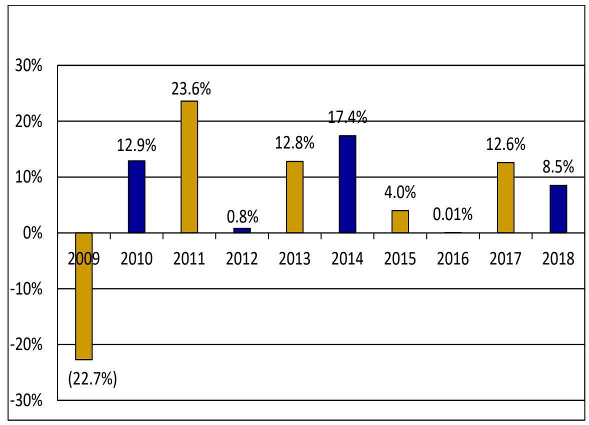


INVESTMENTS

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 8.5 percent, net of fees, for the fiscal year ended June 30, 2018. Total TRS investment assets increased approximately $2.9 billion during the year.

Annual Rate of Return (net of investment expenses)

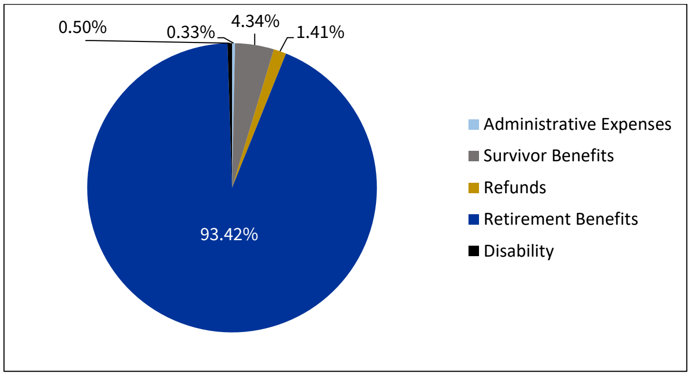


BENEFITS AND REFUNDS

Retirement, survivor and disability benefit payments increased $306 million during FY18. Benefit payments increased to $6.5 billion with 122,423 recipients in FY18. The overall increase in benefit payments is due to an increase in retirement and survivor benefits as well as 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 108,120 as of June 30, 2017 to 110,043 as of June 30, 2018.

Refunds of contributions decreased $192 million in FY18. The decrease during FY18 was due to the majority of eligible members withdrawing Early Retirement Option refunds when the program ended in 2017.

Deductions by Type for the Year Ended June 30, 2018



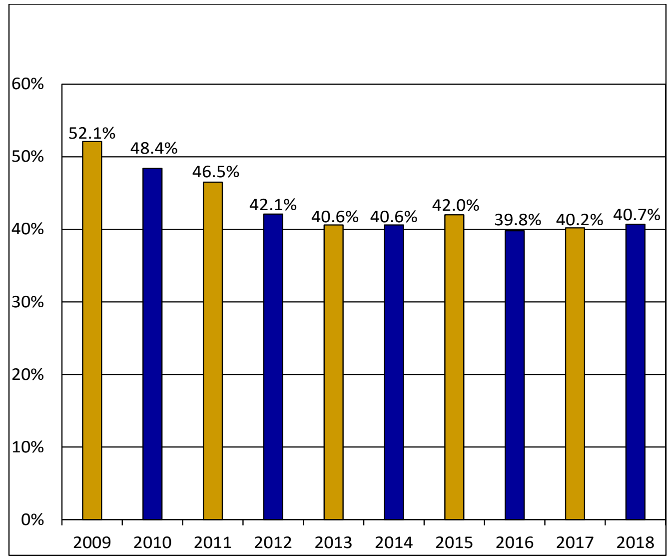
ACTUARIAL

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 benefits earned to date but not yet paid. The actuarial accrued liability based on statutory funding requirements increased $4.1 billion in FY18 to $127.0 billion at June 30, 2018. The actuarial unfunded liability is the present value of accrued benefits payable that are not covered by the actuarial value of assets as of the valuation date. The actuarial unfunded liability increased $1.9 billion during FY18 to $75.3 billion at June 30, 2018. The funded ratio reflects the percentage of the actuarial accrued liability covered by the actuarial value of assets. The funded ratio increased from 40.2 percent on June 30, 2017 to 40.7 percent on June 30, 2018.

The actuarial unfunded liability and funded ratio are based on a smoothed value of assets. Public Act 96-0043 requires the five state retirement systems to smooth actuarial gains and losses on investments over a five-year period.

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 in 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 differs from criteria used to disclose the actuarial accrued liability and actuarial unfunded liability. The total pension liability is $129.9 billion at June 30, 2018, while the net pension liability is $77.9 billion at June 30, 2018.

LEGISLATIVE

During FY18, Gov. Bruce Rauner and the General Assembly made a number of significant changes in the Illinois Pension Code that will have a significant effect on the on-going operations of Teachers' Retirement System.

EXTRA EMPLOYER CONTRIBUTIONS TRIGGERED BY MEMBER SALARY INCREASES IN EXCESS OF 3 PERCENT

A new law reduces the "threshold" on year-to-year salary increases for TRS members that trigger extra employer contributions to TRS. The threshold was lowered to 3 percent from 6 percent. The extra employer contributions are required only if the pay increase would factor into the calculation of a member's initial pension.

The threshold has been a part of state law since 2005. Under its provisions, if a school district grants an educator a raise in excess of the threshold and that raise will be used to calculate his/her "final average salary" for retirement, then the school district must pay for the long–term cost of the portion of that educator's pension created by the portion of the raise that exceeds the threshold.

The new 3 percent threshold on raises applies only to salaries paid to TRS members "under a contract or collective bargaining agreement entered into, amended, or renewed on or after" the effective date of the law for a school year that begins on or after July 1, 2018. The law took effect on June 4, 2018.

ACCELERATED PENSION BENEFIT PAYMENTS

Through fiscal year 2021, TRS must administer two "accelerated pension benefit payment" programs for selected TRS members:

INACTIVE MEMBERS

Inactive members who are eligible for a retirement annuity in the future can apply for a one-time, "accelerated pension benefit payment." In return for the payment, they will give up any future claim to a TRS benefit.

The accelerated payment will equal 60 percent of the present value of the member's anticipated pension benefits. TRS is required to notify all eligible inactive members about the program.

Inactive members in both Tier 1 and Tier 2 may be eligible for the accelerated payment. An inactive Tier 1 member must have at least five years of TRS service. An inactive Tier 2 member must have at least 10 years of TRS service.

RETIRING TIER 1 MEMBERS

All Tier 1 members who retire through June 30, 2021 will be able to choose a one-time "accelerated pension benefit payment." Members accepting this payment will then see a reduction in the automatic annual increase (AAI) that is applied to their TRS pensions.

Members accepting the accelerated payment will renounce their rights to the current Tier 1 AAI, which is a 3 percent annual increase, compounded. They will accept a new AAI – an annual 1.5 percent increase that is not compounded. Also, the new AAI begins on the Jan. 1 following the later of one year after retirement or attainment of age 67. The Tier 1 age requirement for the 3 percent AAI is 61. For each member who accepts the reduced AAI, the "accelerated pension benefit payment" will equal 70 percent of the monetary difference between what he/she would receive in the future with the 3 percent Tier 1 AAI and what he/she would receive with the 1.5 percent AAI.

OPTIONAL DEFINED CONTRIBUTION BENEFIT ADMINISTERED BY TRS

A new state law requires TRS to establish and offer a voluntary defined contribution (DC) benefit plan to all active members. The new DC plan would supplement their existing defined benefit (DB) benefits and not replace it. TRS members cannot opt out of the DB plan.

All DC plan participants and their employers will make contributions to the DC plan. No state funds will be contributed to the DC plan. The law requires TRS to offer "investment options" to all participants. All investment management fees and administrative costs of the DC plan will be paid by members and employing school districts.

This is the first time TRS has been authorized to offer a defined contribution (DC) plan to its members. There is no timetable yet for the implementation of the new plan. The law requires TRS to offer the plan "as soon as practicable."

RE-ENROLLMENT IN THE STATE'S HEALTH INSURANCE PLANS

A new law allows TRS members who have previously opted out of the Teachers' Retirement Insurance Program (TRIP) or the Total Retiree Advantage Illinois Medicare plan (TRAIL) to re-enroll in the programs if they wish.

Prior to this law, if a TRS member opted out of TRIP or TRAIL for any reason, he/she was not allowed to re-enroll, except in very limited circumstances.

Under the new law, former members of TRIP and TRAIL who are still eligible for the programs can re-enroll "during any applicable annual open enrollment period" set up by the Illinois Department of Central Management Services (CMS), which administers TRIP and TRAIL.

TEMPORARY EXPANSION OF POST-RETIREMENT WORK LIMITS FOR TRS MEMBERS

Beginning in the 2018-19 school year, the limits on post-retirement work by retired TRS members in a TRS-covered teaching position during a school year will be increased to 120 days or 600 hours. The new law is designed to help solve a teacher shortage problem that has plagued school districts throughout Illinois.

Up until July 1, 2018, the post-retirement work limits were 100 days or 500 hours. The new limits will be in effect through the 2019-20 school year. The limits automatically revert back to the previous limits in the 2020-21 school year.

Under state law, if a TRS member returns to work and exceeds these post-retirement limits, then the member is declared to be an "active" member by TRS and his/her pension benefits are suspended. His/her pension benefits resume only after he/she "retires" again.

FINANCIAL STATEMENTS

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF ILLINOIS
STATEMENT OF FIDUCIARY NET POSITION
JUNE 30, 2018

	June 30, 2018
Assets	
Cash	$32,034,294
Receivables and prepaid expenses:	
Member contributions	55,935,950
Employer contributions	8,098,383
State of Illinois	422,893,664
Investment income	113,336,497
Pending investment sales	5,253,629,488
Other receivables	204,836
Prepaid expenses	2,659,193
Total receivables and prepaid expenses	5,856,758,011
Investments, at fair value:	
Fixed income	12,138,093,138
Public equities	18,207,596,005
Alternative investments	20,343,876,329
Derivatives	32,220,547
Short-term investments	1,280,712,915
Foreign currency	68,446,828
Total investments	52,070,945,762
Invested securities lending collateral:	
Securities lending collateral	2,248,612,849
Securities lending collateral with the State Treasurer	75,264,000
Total invested securities lending collateral	2,323,876,849
Capital assets, net of accumulated depreciation	2,851,122
Total assets	60,286,466,038
Liabilities	
Benefits and refunds payable	6,180,128
Administrative and investment expenses payable	61,859,989
Pending investment purchases	5,925,019,878
Securities lending collateral	2,323,859,349
Total liabilities	8,316,919,344
Net position restricted for pensions	$51,969,546,694

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, 2018

	June 30, 2018
Additions	
Contributions:	
Members	$938,037,245
State of Illinois	4,095,125,358
Employers	
Federal funds	20,041,292
2.2 benefit formula	59,837,569
Excess salary/sick leave	4,754,256
Total contributions	5,117,795,720
Investment income:	
Net increase in fair value of investments	3,124,845,615
Alternatives income	946,974,692
Interest and dividends	806,299,291
Other investment income	1,692,247
Securities lending income	14,237,647
Less investment expenses:	
Alternatives expense	(458,566,901)
Direct investment expense	(385,356,613)
Securities lending management fees	(854,250)
Net investment increase	4,049,271,728
Total additions	9,167,067,448
Deductions	
Retirement benefits	6,140,877,388
Survivor benefits	285,067,712
Disability benefits	32,764,545
Refunds	92,924,731
Administrative expenses	21,550,896
Total deductions	6,573,185,272
Net increase in net position	2,593,882,176
Net position restricted for pensions	
Beginning of year	49,375,664,518
End of year	$51,969,546,694

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 and employer contributions for the 2.2 formula increase. 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. Public Act 100-0587 lowered the threshold to 3 percent for salary increases effective July 1, 2018 or later under contracts or collective bargaining agreements entered into, amended or renewed on or after June 4, 2018.

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. Employers also pay a contribution on salaries that exceed the governor's statuatory salary. 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 "Schedule of Contributions from Employers and Other Contributing Entities" within the Required Supplementary Information (RSI) section of this report.

The state's statutory contribution requirements are described in the Actuarial Section under "Actuarial Standards and Illinois State Pension Funding."

Number of Employers (as of June 30)

	2018
Local school districts	851
Special districts	127
State agencies	12
Total	**990**

3. MEMBERS

TRS Membership (as of June 30)

	2018
Retirees and beneficiaries	122,423
Inactive members	134,010
Active members	160,859
Total	**417,292**

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 TRS Board of Trustees, by law, is the Illinois superintendent of education. The board elects its vice president from among its members. The board appoints an executive director who also serves as the secretary of the board. 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 who are licensed and 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 Jan. 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 2.

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

Tier 3 was created in July 2017. It is a hybrid retirement plan with both defined benefit and defined contribution plan components.

TIER 1 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 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 consecutive 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 1 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.

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

Disability and death benefits are 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.

Effective July 1, 2017, Tier 1 members contribute 9.0 percent of their creditable earnings to TRS and an additional contribution to a retiree health insurance program that is not administered by TRS.

TIER 2 BENEFITS

Differences with Tier 1 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 2 law caps creditable earnings and contributions used for retirement purposes at a level that is lower than the Social Security Wage Base. Tier 2 annual increases will be the lesser of 3 percent or ½ percent of the rate of inflation of the original benefit beginning Jan. 1 following attainment of age 67 or on Jan. 1 following the member's first anniversary in retirement, whichever is later.

The 2.2 retirement formula also applies to Tier 2 but the final average salary is based on the highest consecutive eight years of creditable service rather than the highest consecutive four years of salary. The single-sum benefit also is payable at age 65 to Tier 2 members with fewer than five years of service. The money purchase (actuarial) benefit is not available to Tier 2 members.

Disability and refund provisions for Tier 2 are identical to those that apply to Tier 1. Death benefits are payable under a formula that is different from Tier 1.

Effective July 1, 2017, Tier 2 members contribute 9.0 percent of their creditable earnings to TRS and an additional contribution to a retiree health insurance program that is not administered by TRS.

TIER 3 BENEFITS

Created in July of 2017, the Tier 3 benefit is a hybrid retirement plan with two parts – a defined benefit (DB) pension and a defined contribution (DC) plan.

An implementation date for Tier 3 has not been set. All new TRS members on or after the date Tier 3 is implemented will be enrolled in Tier 3 and have the option to switch to Tier 2. In addition, after the implementation date, all existing Tier 2 members will have the choice to join Tier 3 permanently.

Tier 3 members will make payroll contributions to their DB pensions that are based on the full cost of this part of the benefit, but no more than 6.2 percent of salary. The DB contribution rate for Tier 3 members will be re-evaluated annually. Tier 3 members will contribute a minimum of 4 percent of their pay to the DC portion of the plan.

The normal retirement age for Tier 3 is determined by Social Security rules, but it will be no earlier than age 67.

The Tier 3 calculation for an initial pension is service credit multiplied by final average salary multiplied by 1.25 percent. The final average salary used in the initial pension calculation is the member's average salary during the last 10 years of service.

The automatic annual increase for Tier 3 is similar to the Tier 2 automatic increase – one-half of the previous year's consumer price index, not compounded. However, unlike the Tier 2 automatic increase, the Tier 3 increase does not have a 3 percent cap.

Local school districts, rather than the state, will contribute the employer contributions to both the DB and DC plans in Tier 3. Under the current law, beginning in FY 2021, school districts will pay 2.58 percent annually of their TRS member salaries to the System for the DB portion and between 2 percent and 6 percent of each individual member's pay to the System for the DC portion.

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. Other schedules pertaining to the System's funded status are in the Actuarial section.

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 with approval by the governor. Since July 1, 1995, state appropriations have been made through a continuing appropriation.

Member contributions are allocated as follows: 7.5 percent for retirement; 0.5 percent for post-retirement increases; and 1 percent for death benefits.

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 any excess salary increase or sick leave costs due and the total employer normal cost on salaries exceeding the governor's salary.

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, requires TRS to use a five-year smoothing method for asset valuation beginning on June 30, 2009. State contribution requirements were first affected by this change in FY11.

Public Act 100-0023, which was effective July 6, 2017, requires the impact on state contributions due to changes in actuarial assumptions to be phased in over five years. State contribution requirements were first affected by this change in FY18. The FY18 requirement was recertified in January 2018 due to the new law.

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 included in the June 30, 2018 actuarial valuation were used to calculate the June 30, 2018 total pension liability. The investment return assumption of 7.0 percent is unchanged in the 2018 actuarial valuation but based on different asset allocation studies conducted by the TRS investment consultant.

The investment return assumption for the 2018 actuarial valuation is based on the 2017 asset allocation conducted by the TRS investment consultant and additional analysis conducted by the actuary in 2018. The investment return assumption for 2017 was based on a 2014 study conducted by the investment consultant and additional analyses conducted by the actuary in 2015, 2016 and 2017.

Different assumptions were used to calculate the June 30, 2017 total pension liability, as discussed later in this section.

As of June 30, 2018, the assumption for future investment returns was 7.0 percent, a rate unchanged from June 30, 2017. The TRS actuary used the following assumed rates of returns by asset class, excluding 2.50 percent for the assumed rate of inflation as well as investment expenses.

Expected Arithmetic Real Returns Over 20 Years

Asset Class	Allocation	Return
U.S. equities large cap	15.0%	6.7%
U.S. equities small/mid cap	2.0	7.9
International equities developed	13.6	7.0
Emerging market equities	3.4	9.4
U.S. bonds core	8.0	2.2
U.S. bonds high yield	4.2	4.4
International debt developed	2.2	1.3
Emerging international debt	2.6	4.5
Real estate	16.0	5.4
Real return	4.0	1.8
Absolute return	14.0	3.9
Private equity	15.0	10.2

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 different from the assumed rate of return. Instead, the discount rate would be a blended rate, which includes the long-term expected rate of return and a municipal bond rate (the Bond Buyer's 20-Bond GO Index) as of the end of the current fiscal year. Based on the following projections, the System can use the long-term expected rate of return as the discount rate for the year ended June 30, 2018, as it did for the prior year.

TRS, with the assistance of the System's actuary, projected that the plan's fiduciary net position will provide for all benefit payments to current plan members. Projected contributions assume that all statutorily required contributions are made through FY2120 including projected contributions from members, employers and the State of Illinois (nonemployer contributing entity). Projected state contributions reflect the changes enacted in Public Acts 100-0023, 100-0340 and 100-0587. However, the projections do not include any assumptions about the utilization of Tier 3 under PA 100-0023.

Estimated contributions from employers and the State of Illinois, of which the majority of the contributions (approximately 98 percent) are provided by the State of Illinois, are projected to be $4.4 billion in 2019, $4.9 billion in 2020 and grow to $10.8 billion by 2045 based on present statutory requirements for current members. Tier 1's liability is partially funded by Tier 2 because the Tier 2 contributions are higher than the cost of Tier 2 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 valuation date based on member census data one year prior. TPL is projected to the June 30, 2018 measurement date based on census data as of June 30, 2017. Assets, referred to as plan fiduciary net position, are measured at fair value.

Net Pension Liability

	June 30, 2018
Total pension liability	$129,914,383,296
Plan fiduciary net position	51,969,546,694
Net pension liability	$77,944,836,602
Plan fiduciary net position as a percentage of the total pension liability	40.0%

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

	1% Decrease	Current	1% Increase
Discount rate	6.0%	7.0%	8.0%
Net pension liability	$95,591,974,194	$77,944,836,602	$63,733,576,730

Most of the actuarial assumptions used in the June 30, 2018 actuarial valuation are based on the actuarial experience analysis dated September 2018 that covered the period July 1, 2014 through June 30, 2017. The TRS Board of Trustees adopted minor increases to assumed rates of salary growth; corrected the severance pay assumption; and adjusted rates of turnover, disability and retirement based on plan experience. However, the investment return assumption of 7.0 percent did not change from the June 30, 2017 actuarial valuation.

Assumptions Used for Financial Reporting Disclosure and the Actuarial Valuation

Actuarial Valuation Date	June 30, 2018
Census Date:	June 30, 2017 with total pension liability projected to June 30, 2018
Actuarial Cost Method:	
For financial reporting purposes	Entry age normal
Asset Valuation Method:	
For financial reporting purposes	Fair value as of valuation date
Actuarial Assumptions:	
Investment rate of return	7.0% adopted effective June 30, 2016
Real rate of investment return	4.5%
Projected salary increases	9.50% with 1 year of service to 4.0% with 20 or more years of service. Includes inflation and real wage growth (productivity) assumptions.
Group size growth rate	0%
Assumed inflation rate	2.5%
Real wage growth (productivity)	0.75%
Post-retirement increase	Tier 1: 3%, compounded; Tier 2: 1.25%, not compounded
Mortality table:	RP - 2014 with future mortality improvements on a fully generational basis using projection table MP-2017.

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 as well as 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. 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, or OPEB) and improves information provided by state and local governmental employers about financial support for OPEB that is provided by other entities. GASB Statement No. 75 was implemented for the year ended June 30, 2018. See "F. Other Post-Employment Benefits for TRS Employees" on pages 55-56.

5. METHOD USED TO VALUE INVESTMENTS

TRS reports investments at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. 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 the majority of 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 amortized 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, 2018 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	8,091,723	370,761	-	8,462,484
Site improvement	1,088,635	39,074	-	1,127,709
Equipment and furniture	2,776,993	189,354	114,479	2,851,868
Software	2,146,738	288,829	-	2,435,567
	14,342,266	888,018	114,479	15,115,805
Less accumulated depreciation:				
Office building	6,712,497	432,270	-	7,144,767
Site improvement	749,670	69,036	-	818,706
Equipment and furniture	2,689,642	202,828	112,553	2,779,917
Software	1,276,927	244,366	-	1,521,293
	11,428,736	948,500	112,553	12,264,683
Total	$2,913,530	($60,482)	$1,926	$2,851,122

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

Office building and site improvements ($25,000 or greater capitalized)	10-40 years
Equipment and furniture ($5,000 or greater capitalized)	3-10 years
Software ($25,000 or greater capitalized)	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 Dec. 31, 1997. (Lump-sum payments for sick leave earned prior to Jan. 1, 1984, are subject to a maximum of 60 days or 420 hours.) Sick time earned after Dec. 31, 1997 is not compensable at termination.

At June 30, 2018, the System had a liability of $2,050,178 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, 2018 was as follows:

	Beginning Balance	Additions	Reductions	Ending Balance
Compensated absences payable	$1,962,887	$948,462	$861,171	$2,050,178
The estimated amount due within one year is:	$108,070			

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, 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 $32,034,294 at June 30, 2018. Of the bank balance, $32,031,041 was on deposit with the State Treasurer at June 30, 2018. 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 certificates of deposit. 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 $1,241,197,064 at June 30, 2018. The STIF fund has an average credit quality rating of A1P1 and a weighted average maturity of 30 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 $68,446,828 at June 30, 2018.

D. INVESTMENTS

1. INVESTMENT POLICIES

Through the TRS 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 TRS 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, 2018.

Long-term Asset Allocation Policy Mix	
Equity investments	54%
Real assets	15
Diversifying strategies	14
Income investments	17
Total	**100%**

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 TRS 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 5 percent of a single issuer within an account. The TRS portfolio has no investments in any one issuer that comprise 5 percent or more of the System's total investments or fiduciary net position.

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, 2018, 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	Asset-Backed Securities	Foreign Debt Securities	U.S. Agency Obligations	U.S. Government Backed Mortgages	Municipals	Commingled Funds	Total
Aaa	$229,992,830	$418,407,367	$53,929,334	$86,288,157	$679,749,043	$1,528,482	$ -	$1,469,895,213
Aa1	36,715,458	16,924,240	2,959,215	-	-	7,888,304	-	64,487,217
Aa2	42,951,694	13,668,880	298,768,348	-	-	8,106,874	66,245,830	429,741,626
Aa3	39,278,210	5,069,400	126,377,996	-	-	7,612,005	-	178,337,611
A1	262,754,790	4,630,454	181,272,148	-	-	2,029,589	-	450,686,981
A2	251,118,433	3,042,226	41,503,318	-	-	8,332,185	242,722,575	546,718,737
A3	465,839,867	4,892,829	191,572,548	-	-	1,597,329	17,800,820	681,703,393
Baa1	258,827,962	2,938,044	160,392,075	-	-	3,895,950	-	426,054,031
Baa2	404,107,415	8,797,186	441,600,035	-	-	982,273	-	855,486,909
Baa3	393,856,458	3,420,079	291,541,871	-	-	3,240,004	74,435,157	766,493,569
Ba1	147,503,320	3,980,728	77,788,695	-	-	1,335,131	104,126,949	334,734,823
Ba2	58,168,153	-	254,368,640	-	-	-	-	312,536,793
Ba3	123,714,992	1,168,612	76,546,748	-	-	-	-	201,430,352
B1	122,564,765	-	36,967,718	-	-	-	799,770,436	959,302,919
B2	102,048,378	-	237,857,630	-	-	-	398,875,029	738,781,037
B3	31,754,428	-	95,692,309	-	-	-	36,623,912	164,070,649
Caa1	12,984,059	-	9,226,973	-	-	-	-	22,211,032
Caa2	6,337,438	238,146	26,001,100	-	-	-	-	32,576,684
Caa3	10,050,718	-	-	-	-	-	-	10,050,718
Ca	1,286,757	2,584,909	-	-	-	-	-	3,871,666
C	1,368,196	72,482	2,669,507	-	-	-	-	4,110,185
Not available	-	-	-	-	-	-	1,767,854,457	1,767,854,457
Not rated	18,830,577	7,392,939	39,806,673	-	-	-	-	66,030,189
Withdrawn	2,113,140	209,020	380	-	-	-	-	2,322,540
Total credit risk, bonds, corporate notes and government obligations	**3,024,168,038**	**497,437,541**	**2,646,843,261**	**86,288,157**	**679,749,043**	**46,548,126**	**3,508,455,165**	**10,489,489,331**
U.S. Treasuries								1,648,603,807
Total bonds, corporate notes & government obligations	**$3,024,168,038**	**$497,437,541**	**$2,646,843,261**	**$86,288,157**	**$679,749,043**	**$46,548,126**	**$3,508,455,165**	**$12,138,093,138**

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, 2018 is as follows:

		Maturity in Years					
Type	2018 Fair Value	Less Than 1 year	1 to 5 years	5 to 10 years	10 to 20 years	More Than 20 years	Other*
U.S. treasuries/agencies	$1,734,891,964	$97,221,859	$757,318,816	$535,909,494	$68,317,736	$276,124,059	$ -
U.S. goverment-backed mortgages	679,749,043	1,238,735	4,515,264	21,665,583	23,357,978	628,971,483	-
Municipals	46,548,126	1,267,061	293,415	2,919,246	15,857,779	26,210,625	-
Asset-backed securities	497,437,541	10,837	229,193,884	72,743,890	168,066,293	27,422,637	-
Commingled funds (U.S. & international)**	3,508,455,165	-	1,041,349,377	969,449,034	-	-	1,497,656,754
Corporate debt securities	3,024,168,038	351,214,025	1,254,020,598	976,176,782	139,006,892	303,749,741	-
Foreign debt/corporate obligations	2,646,843,261	357,962,403	902,222,501	1,073,826,710	191,768,562	121,063,085	-
Total bonds, corporate notes and government obligations	**12,138,093,138**	**808,914,920**	**4,188,913,855**	**3,652,690,739**	**606,375,240**	**1,383,541,630**	**1,497,656,754**
Derivatives	32,220,547	(2,888,824)	(4,037,175)	26,585,203	(370,579)	12,931,922	-
Total bonds, corporate notes, government obligations, securities lending collateral and derivatives	**$12,170,313,685**	**$806,026,096**	**$4,184,876,680**	**$3,679,275,942**	**$606,004,661**	**$1,396,473,552**	**$1,497,656,754**

** 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, 2018 is as follows:

Currency	Foreign Currency	Equities	Fixed Income	Derivatives	Total
Argentine Peso	$1,230,878	$ -	$87,589,340	$ -	$88,820,218
Australian Dollar	1,998,123	433,714,247	26,102,984	-	461,815,354
Brazilian Real	498,903	104,527,336	151,472,189	(1,390,603)	255,107,825
British Pound	13,573,650	1,139,949,198	133,845,209	(1,256,670)	1,286,111,387
Canadian Dollar	1,541,289	505,505,866	17,492,491	-	524,539,646
Chilean Peso	148,321	9,373,753	5,257,770	-	14,779,844
Chinese Yuan Renminbi	142,990	8,183,939	-	-	8,326,929
Columbia Peso	523,488	574,094	61,596,350	-	62,693,932
Czech Koruna	1,134,479	121,685	-	-	1,256,164
Danish Krone	92,416	121,022,710	2,353,864	-	123,468,990
Egyptian Pound	(451,885)	1,962,967	26,567,664	-	28,078,746
Emirati Dirham	12,011	5,265,063	-	-	5,277,074
Euro	16,411,030	2,298,379,438	198,528,608	(8,781)	2,513,310,295
Ghana Cedi	1,641,525	-	45,736,275	-	47,377,800
Hong Kong Dollar	4,716,171	726,080,900	-	(1,529,323)	729,267,748
Hungarian Forint	553,618	9,325,786	4,317,737	-	14,197,141
Indian Rupee	1,580,371	138,625,049	100,625,277	-	240,830,697
Indonesian Rupiah	(260,945)	43,233,965	108,282,529	-	151,255,549
Israeli Shekel	329,799	37,818,892	-	9,003	38,157,694
Japanese Yen	13,620,934	1,760,158,066	35,485,702	(725,415)	1,808,539,287
Malaysian Ringgit	797,521	37,535,929	5,272,807	-	43,606,257
Mexican Peso	(9,477,302)	56,644,461	231,104,226	(7,854)	278,263,531
Moroccan Dirham	522	-	-	-	522
New Taiwan Dollar	2,792,972	199,737,719	-	(146)	202,530,545
New Zealand Dollar	1,102,776	7,774,782	5,643,301	(17,520)	14,503,339
Nigerian Naira	1,241,534	-	4,611,113	-	5,852,647
Norwegian Krone	2,122,322	107,099,778	-	-	109,222,100
Pakistani Rupee	13,558	1,400,740	-	-	1,414,298
Peruvian Sol	55,578	-	10,143,270	-	10,198,848
Philippine Peso	160,958	16,407,008	10,067,300	-	26,635,266
Polish Zloty	202,426	21,820,567	7,709,662	314,401	30,047,056
Qatari Riyal	19,171	2,115,790	-	-	2,134,961
Romanian Leu	-	-	8,288,499	-	8,288,499
Russian Ruble	-	6,371,680	19,258,630	-	25,630,310
Serbian Dinar	-	-	5,985,953	-	5,985,953
Singapore Dollar	2,572,634	104,891,210	-	-	107,463,844
South African Rand	238,331	96,881,354	17,561,203	12,228	114,693,116
South Korean Won	4,227,371	314,507,472	127,872,543	(859,062)	445,748,324
Swedish Krona	369,469	173,088,152	7,019,596	-	180,477,217
Swiss Franc	2,267,958	433,305,866	-	-	435,573,824
Thailand Baht	573,598	65,037,950	8,567,642	-	74,179,190
Turkish Lira	216,902	32,019,637	11,087,776	(14,453)	43,309,862
Ukraine Hryvnia	(88,637)	-	-	-	(88,637)
Uruguayan Peso	-	-	1,331,219	-	1,331,219
Total subject to foreign currency risk	**68,446,828**	**9,020,463,049**	**1,486,778,729**	**(5,474,195)**	**10,570,214,411**
Investments in international securities payable in U.S. dollars	-	1,395,044,255	1,166,585,074	(376,653)	2,561,252,676
Total international investment securities (including domestic securities payable in foreign currency)	**68,446,828**	**10,415,507,304**	**2,653,363,803**	**(5,850,848)**	**13,131,467,087**
Domestic investments (excluding securities payable in foreign currency)	-	7,792,088,701	9,484,729,335	38,071,395	17,314,889,431
Total fair value	**$68,446,828**	**$18,207,596,005**	**$12,138,093,138**	**$32,220,547**	**$30,446,356,518**

In addition to the previous table, the fair value of TRS's investments in foreign currency denominated real estate and private equity funds was $23,566,117 and $509,686,422 at June 30, 2018, respectively. Currencies included Euro, British pound, Canadian dollar, Japanese yen and South Korean won.

3. SECURITIES LENDING PROGRAM

The TRS 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 allowing TRS, upon demand, to return the collateral in exchange for the original securities. 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, "Accounting and Financial Reporting for Securities Lending Transactions."

As of June 30, 2018, 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 weighted average term of the loans is 22 days as securities on loan can be recalled on demand by TRS or the borrower can return the loaned securities at any time. 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, evaluated on an individual basis. As of June 30, 2018, there were no term loans outstanding.

Cash collateral received is invested in a separate account managed by the lending agent, with a weighted average maturity of 70 days at June 30, 2018. 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, 2018, TRS had outstanding loaned investment securities with a fair value of $2,350,239,549 against which it had received cash and non-cash collateral with a fair value of $2,453,194,510. The securities on loan remain on TRS's Statement of Fiduciary Net Position in their respective investment categories. As of June 30, 2018, TRS cash collateral received and reported as securities lending obligation on the Statement of Fiduciary Net Position totaled $2,248,595,349; whereas, the fair value of reinvested cash collateral reported as securities lending collateral was $2,248,612,849. The net increase (decrease) in fair value of investments within the Statement of Changes in Fiduciary Net Position reflects the change in fair value of the re-invested cash collateral. 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**.

Income earned and costs related to securities lending activities are reported on the Statement of Changes in Fiduciary Net Position. For FY18, the System earned net income of $13,383,397 from securities lending. Additional detail regarding securities lending activity is included within the Investments section.

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. The Commodity Futures Trading Commission (CFTC) mandates that any entity that trades or is counterparty to OTC (over-the-counter) derivatives must have a Global Market Entity Identifier (GMEI). TRS is registered and maintains a legal entity identifier.

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 TRS Board of Trustees and senior management. The derivative positions of the investment managers are reviewed on a regular basis to monitor compliance.

As of June 30, 2018, 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, 2018, the TRS investment portfolio held the following derivatives.

Investment Derivatives	Fair Value at June 30, 2018	Change in Fair Value	Shares/Par	Notional
Rights	$1,427,634	$384,021	5,083,010	$5,083,010
Warrants	59,388,249	17,886,622	14,583,576	14,583,576
Currency forwards	50,775,049	(9,282,515)	-	-
Equity futures long	-	5,740,881	100,650,585	71,735,971
Equity futures short	-	(2,278,613)	(308,680)	(37,161,220)
Fixed income futures long	-	(18,840,364)	1,060,993,365	1,212,859,862
Fixed income futures short	-	14,956,349	(1,269,851,568)	(1,344,912,360)
Commodity futures long	-	11,051,176	1,657,825	21,394,269
Commodity futures short	-	(9,522,306)	(5,582,110)	(5,752,846)
Currency forward options purchased	990	(3,242,344)	3,300,000	312,638
Currency forward options written	(36)	1,717,324	(100,000)	795
Options on futures purchased	32,625	121,899	174,000	4,449,163
Options on futures written	(671,595)	1,944,351	(3,022,000)	73,149,559
Swaptions purchased	5,455,938	(1,106,612)	416,550,000	67,710,497
Swaptions written	(9,078,511)	(1,426,581)	(420,433,725)	253,260,961
Inflation options	(218,647)	12,674	(176,700,000)	78,944,287
Credit default swaps buying protection	(830,239)	(312,413)	74,740,341	75,783,794
Credit default swaps selling protection	843,951	293,709	182,187,263	183,077,533
Index and variance swaps	(1,987,990)	780,707	(37,586,943)	46,952,751
Pay fixed interest rate swaps	48,227,057	49,811,080	1,956,045,805	1,959,412,997
Receive fixed interest rate swaps	(7,838,911)	(6,808,029)	328,096,112	320,497,549
Pay fixed inflation swaps	(911,561)	1,170,796	134,740,314	133,172,337
Receive fixed inflation swaps	(802,524)	(612,123)	156,722,045	155,919,522
Grand total	**$143,811,479**	**$52,439,689**		**$3,290,474,645**

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, 2018, TRS had currency forward purchase or sale contracts for 35 different currencies with various settlement dates.

Fair Value: As of June 30, 2018, TRS's open currency forward contracts had a net fair value (unrealized gain) of $50,775,049.

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, 2018, TRS had outstanding futures contracts with a notional value, or exposure, of ($81,836,324). Notional values do not represent the actual values in the Statement of Fiduciary Net Position. The contracts have various expiration dates through March 2020.

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 loss on futures contracts was $7,885,044 during FY18.

Type	Number of Contracts	Notional Principal
Commodity Futures		
Commodity futures - long	425	$21,394,269
Commodity futures - short	(173)	(5,752,846)
Equity Futures		
U.S. stock index futures - long	8	425,320
International equity index futures - long	1,040	71,310,651
International equity index futures - short	(2,326)	(37,161,220)
Fixed Income/Cash Equivalent Futures		
Fixed income index futures – long	6,393	790,842,220
Fixed income index futures – short	(2,340)	(329,287,110)
International fixed income index futures – long	411	74,760,117
International fixed income index futures – short	(1,105)	(175,954,222)
Cash equivalent (eurodollar) futures – long	1,425	347,257,525
Cash equivalent (eurodollar) futures – short	(3,514)	(839,671,028)
Total futures (net)	**244**	**($81,836,324)**

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, 2018, the TRS investment portfolio held currency forward options with notional value of $313,433, inflation options with notional value of $78,944,287 and options on futures with underlying notional value of $77,598,722. Contractual principal/notional values do not represent the actual values in the Statement of Fiduciary Net Position. The contracts have various expiration dates through May 2024.

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, 2018, the fair value of all option contracts, gross of premiums received, was ($856,663). 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, 2018. 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
Currency Forward Options		
Currency forward put options - purchased	1	$312,638
Currency forward put options - written	1	795
Inflation Options		
Inflation call options - written	4	78,127,477
Inflation put options - written	9	816,810
Options on Futures		
Fixed income call options on futures USD - written	174	4,449,163
Fixed income put options on futures USD - purchased	(721)	38,428,487
Fixed income put options on futures USD - written	(789)	34,721,072

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, 2018, TRS had outstanding written call swaption exposure of $2,763,759, written put swaption exposure of $250,497,202, purchased call swaption exposure of $10,817,593 and purchased put swaption exposure of $56,892,904. The contracts have various maturity dates through June 2035. 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, 2018, the fair value of swaption contracts was ($3,622,573).

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, 2018, TRS had credit default/index swaps in its portfolio with various maturity dates through May 2063. The notional values as of June 30, 2018 included purchased credit default swaps (buying protection) of $75,783,794, written credit default swaps (selling protection) of $183,077,533 and index swaps of $46,952,751.

Fair Value: The fair value of credit default swaps, including index swaps, held by TRS was ($1,974,278) as of June 30, 2018. 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, 2018, TRS held interest rate swaps in various currencies with various expiration/maturity dates ranging from 2018 to 2068. 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, 2018.

	As of June 30, 2018
Receive floating/pay fixed	$48,227,057
Receive fixed/pay floating	(7,838,911)

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, 2018, TRS was a party to inflation-linked swaps denominated in various currencies with expiration dates through March 2048. 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 ($1,714,085) as of June 30, 2018.

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, 2018.

Asset Description	Par	Gross Notional	TRS Receives	TRS Pays	Maturity Date	Fair Value 6/30/18
Pay Fixed Interest Rate Swaps:						
Interest Rate Swap USD	6,075,000	$6,140,816	12 month LIBOR	1.25%	10/7/2018	$6,444
Interest Rate Swap USD	92,600,000	92,678,069	3 month LIBOR	1.75	12/16/2018	296,940
Interest Rate Swap USD	62,560,000	62,560,000	12 month LIBOR	1.43	3/31/2019	302,733
Interest Rate Swap EUR	3,550,000	4,144,804	6 month EURIBOR	0.14	5/11/2019	(4,178)
Interest Rate Swap USD	6,445,000	6,515,866	12 month LIBOR	1.49	6/30/2019	45,019
Interest Rate Swap USD	8,175,000	8,264,886	12 month LIBOR	1.50	6/30/2019	54,850
Interest Rate Swap USD	3,650,000	3,699,720	12 month LIBOR	1.43	7/14/2019	29,960
Interest Rate Swap USD	10,045,000	10,163,832	12 month LIBOR	1.29	9/8/2019	107,199
Interest Rate Swap GBP	700,000	926,139	6 month LIBOR	2.05	9/23/2019	(12,789)
Interest Rate Swap USD	56,150,000	56,593,133	12 month LIBOR	1.71	9/30/2019	363,101
Interest Rate Swap USD	18,300,000	18,315,428	3 month LIBOR	2.00	12/16/2019	185,554
Interest Rate Swap USD	200,000	200,142	3 month LIBOR	2.00	12/20/2019	2,044
Interest Rate Swap USD	139,665,000	139,665,000	12 month LIBOR	1.84	12/31/2019	968,511
Interest Rate Swap USD	62,540,000	62,540,000	12 month LIBOR	1.95	12/31/2019	331,737
Interest Rate Swap USD	28,985,000	29,108,210	12 month LIBOR	2.04	12/31/2019	115,059
Interest Rate Swap USD	56,600,000	56,840,566	12 month LIBOR	2.11	12/31/2019	169,031
Interest Rate Swap ILS	22,450,000	6,140,106	3 month TELBOR	0.29	2/16/2020	6,367
Interest Rate Swap USD	4,035,000	4,035,000	12 month LIBOR	2.16	3/8/2020	14,086
Interest Rate Swap ILS	13,770,000	3,768,887	3 month TELBOR	0.27	3/21/2020	7,049
Interest Rate Swap USD	41,975,000	41,975,000	12 month LIBOR	2.30	3/31/2020	56,993
Interest Rate Swap USD	17,185,000	17,185,000	12 month LIBOR	2.37	3/31/2020	1,838
Interest Rate Swap USD	21,670,000	21,670,000	12 month LIBOR	2.31	4/24/2020	23,238
Interest Rate Swap ILS	16,530,000	4,522,154	3 month TELBOR	0.37	6/20/2020	6,297
Interest Rate Swap ILS	11,400,000	3,115,655	3 month TELBOR	0.42	6/20/2020	1,271
Interest Rate Swap USD	24,600,000	24,617,474	3 month LIBOR	1.75	6/20/2020	490,979
Interest Rate Swap USD	1,700,000	1,701,100	3 month LIBOR	1.25	6/21/2020	50,279
Interest Rate Swap GBP	17,220,000	22,734,714	6 month LIBOR	1.25	9/19/2020	(77,195)
Interest Rate Swap USD	500,000	500,422	3 month LIBOR	2.00	12/16/2020	9,935
Interest Rate Swap USD	800,000	800,518	3 month LIBOR	1.25	6/21/2021	36,785
Interest Rate Swap USD	52,250,000	52,489,102	12 month LIBOR	2.33	9/27/2021	255,620
Interest Rate Swap EUR	1,125,000	1,313,494	6 month EURIBOR	0.16	5/11/2022	(3,338)
Interest Rate Swap USD	9,030,000	9,030,000	12 month LIBOR	2.35	5/31/2022	47,457
Interest Rate Swap USD	810,000	810,000	12 month LIBOR	2.36	9/27/2022	4,345
Interest Rate Swap USD	14,115,000	14,115,000	12 month LIBOR	2.61	11/30/2022	(43,323)
Interest Rate Swap BRL	2,765,901	718,901	3 month Brazilian CDI	9.26	1/2/2023	96,133
Interest Rate Swap BRL	4,645,645	1,207,477	3 month Brazilian CDI	9.28	1/2/2023	32,508
Interest Rate Swap EUR	2,770,000	3,234,115	6 month EURIBOR	0.65	5/11/2023	(64,947)
Interest Rate Swap GBP	41,800,000	55,186,472	6 month LIBOR	1.50	9/19/2023	(423,930)
Interest Rate Swap USD	20,300,000	20,313,140	3 month LIBOR	1.75	12/21/2023	1,171,144
Interest Rate Swap USD	825,000	827,523	3 month LIBOR	2.11	2/15/2024	33,137
Interest Rate Swap USD	8,548,000	8,574,142	3 month LIBOR	2.15	2/15/2024	328,241
Interest Rate Swap USD	2,595,000	2,602,936	3 month LIBOR	2.18	2/15/2024	95,239
Interest Rate Swap USD	15,988,000	16,080,401	3 month LIBOR	2.79	3/31/2024	80,349

(continued)

(continued)

Asset Description	Par	Gross Notional	TRS Receives	TRS Pays	Maturity Date	Fair Value 6/30/18
Interest Rate Swap USD	15,955,000	$16,003,795	3 month LIBOR	1.96%	5/15/2024	$803,412
Interest Rate Swap USD	13,144,000	13,215,688	3 month LIBOR	2.73	7/7/2024	111,894
Interest Rate Swap USD	25,855,000	25,934,071	3 month LIBOR	2.17	8/15/2024	1,047,943
Interest Rate Swap USD	14,410,000	14,454,070	3 month LIBOR	2.18	8/15/2024	579,408
Interest Rate Swap USD	53,215,000	53,377,746	3 month LIBOR	2.33	11/15/2024	1,734,956
Interest Rate Swap USD	13,890,000	13,951,898	3 month LIBOR	1.91	1/22/2025	817,288
Interest Rate Swap USD	17,360,000	17,437,362	3 month LIBOR	1.97	1/23/2025	964,001
Interest Rate Swap USD	10,240,000	10,283,738	3 month LIBOR	1.97	1/27/2025	567,512
Interest Rate Swap USD	2,560,000	2,570,396	3 month LIBOR	1.94	1/29/2025	147,466
Interest Rate Swap USD	2,170,000	2,178,813	3 month LIBOR	1.94	1/30/2025	124,522
Interest Rate Swap USD	3,420,000	3,432,796	3 month LIBOR	1.82	2/3/2025	222,585
Interest Rate Swap USD	7,920,000	7,920,840	12 month LIBOR	2.45	2/28/2025	26,912
Interest Rate Swap USD	5,525,000	5,525,717	3 month LIBOR	3.02	2/28/2025	(44,785)
Interest Rate Swap USD	7,050,000	7,051,831	3 month LIBOR	1.98	3/27/2025	397,522
Interest Rate Swap USD	7,050,000	7,051,831	3 month LIBOR	1.99	3/27/2025	394,346
Interest Rate Swap EUR	190,000	221,835	6 month EURIBOR	0.65	5/11/2025	(2,826)
Interest Rate Swap USD	7,760,000	7,804,350	3 month LIBOR	2.45	7/2/2025	187,029
Interest Rate Swap USD	6,800,000	6,818,054	3 month LIBOR	2.33	8/19/2025	260,827
Interest Rate Swap USD	2,200,000	2,203,830	3 month LIBOR	2.30	12/3/2025	92,383
Interest Rate Swap GBP	20,760,000	27,408,401	6 month LIBOR	2.34	1/13/2026	(934,931)
Interest Rate Swap JPY	1,490,000,000	13,452,601	6 month JPY LIBOR	0.30	3/18/2026	(105,328)
Interest Rate Swap USD	16,200,000	16,200,000	3 month LIBOR	2.30	4/27/2026	473,792
Interest Rate Swap USD	2,600,000	2,606,505	3 month LIBOR	2.25	6/15/2026	121,531
Interest Rate Swap USD	27,600,000	27,600,000	3 month LIBOR	1.85	7/20/2026	1,341,834
Interest Rate Swap USD	6,050,000	6,050,000	3 month LIBOR	1.85	7/27/2026	294,059
Interest Rate Swap USD	25,600,000	25,600,000	3 month LIBOR	2.00	7/27/2026	1,078,596
Interest Rate Swap USD	12,000,000	12,000,000	3 month LIBOR	2.05	8/31/2026	476,617
Interest Rate Swap USD	44,500,000	44,500,000	3 month LIBOR	2.40	12/7/2026	1,108,819
Interest Rate Swap USD	36,400,000	36,423,561	3 month LIBOR	1.75	12/21/2026	3,201,329
Interest Rate Swap USD	6,171,000	6,209,492	12 month LIBOR	1.82	2/15/2027	330,123
Interest Rate Swap USD	4,330,000	4,357,008	12 month LIBOR	1.90	2/15/2027	206,364
Interest Rate Swap USD	1,720,000	1,730,729	12 month LIBOR	1.96	2/15/2027	73,161
Interest Rate Swap USD	4,335,000	4,362,038	12 month LIBOR	2.07	2/15/2027	149,683
Interest Rate Swap USD	1,790,000	1,796,361	3 month LIBOR	2.31	5/8/2027	84,666
Interest Rate Swap USD	525,000	526,606	3 month LIBOR	2.29	5/15/2027	25,612
Interest Rate Swap USD	6,300,000	6,304,078	3 month LIBOR	1.50	6/21/2027	726,368
Interest Rate Swap JPY	1,730,000,000	15,619,455	6 month JPY LIBOR	0.30	9/20/2027	(62,600)
Interest Rate Swap USD	6,200,000	6,204,404	3 month LIBOR	2.50	12/20/2027	234,990
Interest Rate Swap JPY	980,000,000	8,848,015	6 month JPY LIBOR	0.30	3/20/2028	(19,494)
Interest Rate Swap JPY	520,000,000	4,694,795	6 month JPY LIBOR	0.30	3/21/2028	(10,379)
Interest Rate Swap NZD	1,200,000	816,923	3 month NZD Bank Bill	3.25	3/21/2028	(17,520)
Interest Rate Swap USD	2,000,000	2,000,000	3 month LIBOR	3.10	4/17/2028	(6,100)
Interest Rate Swap EUR	8,910,000	10,402,875	6 month EURIBOR	0.75	5/11/2028	57,058
Interest Rate Swap USD	208,000,000	208,147,747	3 month LIBOR	2.25	6/20/2028	12,305,402
Interest Rate Swap GBP	13,700,000	18,087,432	6 month LIBOR	1.50	9/19/2028	85,600
Interest Rate Swap JPY	4,220,000,000	38,098,677	6 month JPY LIBOR	0.45	3/20/2029	(411,812)
Interest Rate Swap EUR	2,700,000	3,152,386	6 month EURIBOR	1.12	2/15/2030	(39,239)

(continued)

(continued)

Asset Description	Par	Gross Notional	TRS Receives	TRS Pays	Maturity Date	Fair Value 6/30/18
Interest Rate Swap EUR	320,000	$373,616	6 month EURIBOR	1.00%	5/11/2033	$11,541
Interest Rate Swap GBP	1,800,000	2,376,451	6 month LIBOR	2.04	2/1/2037	(46,499)
Interest Rate Swap GBP	5,100,000	6,733,278	6 month LIBOR	2.05	2/1/2037	(137,397)
Interest Rate Swap USD	2,800,000	2,810,477	3 month LIBOR	2.51	5/3/2037	188,917
Interest Rate Swap EUR	2,650,000	3,094,009	6 month EURIBOR	2.11	10/25/2037	(32,412)
Interest Rate Swap JPY	720,000,000	6,500,582	6 month JPY LIBOR	0.75	3/20/2038	(115,802)
Interest Rate Swap USD	870,000	872,661	3 month LIBOR	2.66	11/15/2043	46,435
Interest Rate Swap USD	19,030,000	19,139,982	3 month LIBOR	3.49	3/31/2044	(1,970,817)
Interest Rate Swap USD	1,800,000	1,801,518	3 month LIBOR	2.75	12/16/2045	82,955
Interest Rate Swap USD	19,850,000	19,897,253	3 month LIBOR	2.50	6/15/2046	1,903,430
Interest Rate Swap USD	5,400,000	5,435,031	3 month LIBOR	2.25	9/14/2046	789,634
Interest Rate Swap USD	48,300,000	48,431,261	3 month LIBOR	2.38	11/18/2046	5,360,107
Interest Rate Swap USD	19,100,000	19,112,363	3 month LIBOR	2.25	12/21/2046	2,805,921
Interest Rate Swap USD	7,500,000	7,537,743	3 month LIBOR	2.54	4/13/2047	595,872
Interest Rate Swap USD	1,180,000	1,186,668	3 month LIBOR	2.54	10/4/2047	96,487
Interest Rate Swap GBP	1,210,000	1,599,699	6 month LIBOR	1.68	10/30/2047	(22,182)
Interest Rate Swap USD	4,870,000	4,912,224	12 month LIBOR	2.00	12/15/2047	468,921
Interest Rate Swap USD	1,300,000	1,311,018	12 month LIBOR	2.43	12/20/2047	9,216
Interest Rate Swap USD	863,000	870,314	12 month LIBOR	2.48	12/20/2047	(2,978)
Interest Rate Swap USD	1,110,000	1,119,407	12 month LIBOR	2.50	12/20/2047	(8,765)
Interest Rate Swap USD	10,000,000	10,007,103	3 month LIBOR	2.75	12/20/2047	466,303
Interest Rate Swap USD	15,000,000	15,009,709	3 month LIBOR	2.59	12/21/2047	1,029,590
Interest Rate Swap EUR	835,000	974,905	6 month EURIBOR	1.86	1/26/2048	(11,518)
Interest Rate Swap USD	17,234,000	17,279,720	3 month LIBOR	2.98	2/20/2048	(196,776)
Interest Rate Swap USD	17,234,000	17,278,605	3 month LIBOR	3.00	2/22/2048	(276,293)
Interest Rate Swap USD	17,234,000	17,277,501	3 month LIBOR	3.02	2/23/2048	(337,042)
Interest Rate Swap USD	2,805,000	2,807,365	3 month LIBOR	2.97	3/16/2048	(26,430)
Interest Rate Swap EUR	2,870,000	3,350,870	6 month EURIBOR	1.66	3/19/2048	(6,240)
Interest Rate Swap USD	400,000	400,156	3 month LIBOR	2.54	3/23/2048	36,065
Interest Rate Swap USD	3,700,000	3,702,869	3 month LIBOR	2.15	6/19/2048	635,102
Interest Rate Swap USD	28,390,000	28,410,166	3 month LIBOR	2.50	6/20/2048	2,804,679
Interest Rate Swap EUR	6,300,000	7,355,568	6 month EURIBOR	1.50	9/19/2048	(54,754)
Interest Rate Swap GBP	7,020,000	9,268,159	6 month LIBOR	1.75	9/19/2048	(279,632)
Interest Rate Swap GBP	2,200,000	2,910,652	6 month LIBOR	1.50	3/21/2068	23,051
		$1,959,412,997				**$48,227,057**
Receive Fixed Interest rate swaps:						
Interest Rate Swap BRL	208,700,000	$53,778,309	7.50%	3 month Brazilian CDI	1/2/2020	($466,116)
Interest Rate Swap BRL	9,237,593	2,306,610	8.66	3 month Brazilian CDI	1/4/2021	(94,387)
Interest Rate Swap BRL	15,259,148	3,965,412	8.67	3 month Brazilian CDI	1/4/2021	(681)
Interest Rate Swap USD	118,800,000	115,664,548	2.25	3 month LIBOR	12/20/2022	(3,217,127)
Interest Rate Swap BRL	5,260,676	1,193,948	9.46	3 month Brazilian CDI	1/2/2023	(173,385)
Interest Rate Swap EUR	31,100,000	36,640,346	0.50	6 month EURIBOR	9/19/2023	329,525
Interest Rate Swap USD	6,000,000	5,928,756	2.68	3 month LIBOR	10/25/2023	(71,244)
Interest Rate Swap USD	3,700,000	3,653,662	2.67	3 month LIBOR	11/19/2023	(46,338)
Interest Rate Swap USD	7,000,000	6,914,138	2.68	3 month LIBOR	12/12/2023	(85,862)
Interest Rate Swap BRL	14,213,147	3,267,761	9.40	3 month Brazilian CDI	1/2/2025	(426,460)

(continued)

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Asset Description	Par	Gross Notional	TRS Receives	TRS Pays	Maturity Date	Fair Value 6/30/18
Interest Rate Swap BRL	10,680,462	$2,617,581	9.57%	3 month Brazilian CDI	1/2/2025	($158,440)
Interest Rate Swap BRL	14,705,323	3,671,529	9.69	3 month Brazilian CDI	1/2/2025	(150,616)
Interest Rate Swap BRL	18,100,000	4,761,518	11.97	3 month Brazilian CDI	1/4/2027	57,042
Interest Rate Swap ILS	4,730,000	1,299,315	1.97	3 month TELBOR	2/16/2028	(2,262)
Interest Rate Swap ILS	2,890,000	785,052	1.88	3 month TELBOR	3/21/2028	(8,589)
Interest Rate Swap ILS	3,530,000	961,339	2.00	3 month TELBOR	6/20/2028	(3,577)
Interest Rate Swap ILS	2,430,000	666,699	2.08	3 month TELBOR	6/20/2028	2,448
Interest Rate Swap USD	41,980,000	39,396,930	2.25	3 month LIBOR	6/20/2028	(2,611,931)
Interest Rate Swap USD	3,540,000	3,339,590	2.43	3 month LIBOR	5/3/2032	(214,294)
Interest Rate Swap GBP	2,165,000	2,874,745	1.63	6 month LIBOR	10/30/2032	8,495
Interest Rate Swap USD	5,965,000	5,491,919	2.34	3 month LIBOR	2/15/2036	(525,776)
Interest Rate Swap EUR	7,500,000	8,807,903	2.05	6 month EURIBOR	2/3/2037	51,274
Interest Rate Swap EUR	2,650,000	3,129,034	2.09	3 month EURIBOR	10/25/2037	35,026
Interest Rate Swap USD	3,740,000	3,791,610	2.99	3 month LIBOR	3/16/2038	19,027
Interest Rate Swap USD	1,340,000	1,246,290	2.53	3 month LIBOR	10/4/2042	(101,893)
Interest Rate Swap EUR	835,000	986,507	1.85	3 month EURIBOR	1/26/2048	11,602
Interest Rate Swap EUR	2,870,000	3,356,498	1.65	3 month EURIBOR	3/19/2048	5,628
		$320,497,549				**($7,838,911)**
Pay Fixed Inflation-Linked Swaps:						
Inflation Swap USD	9,400,000	$9,400,000	U.S. CPI URNSA	1.46%	7/18/2018	$111,589
Inflation Swap USD	15,620,000	15,620,000	U.S. CPI URNSA	2.07	3/23/2019	24,960
Inflation Swap USD	1,370,000	1,370,000	U.S. CPI URNSA	1.93	5/8/2019	1,960
Inflation Swap EUR	14,300,000	16,782,157	EMU HICP	0.99	3/30/2020	86,185
Inflation Swap EUR	800,000	934,040	France CPI ex-Tobacco Index	1.00	4/15/2020	3,983
Inflation Swap USD	3,300,000	3,300,000	U.S. CPI URNSA	2.17	7/15/2020	16,915
Inflation Swap USD	4,600,000	4,646,279	U.S. CPI URNSA	2.03	11/23/2020	46,279
Inflation Swap USD	4,400,000	4,444,948	U.S. CPI URNSA	2.02	11/25/2020	44,948
Inflation Swap EUR	12,930,000	15,096,428	France CPI ex-Tobacco Index	1.35	6/15/2021	4,641
Inflation Swap USD	1,700,000	1,700,000	U.S. CPI URNSA	1.55	7/26/2021	61,922
Inflation Swap USD	1,240,000	1,240,000	U.S. CPI URNSA	1.60	9/12/2021	40,876
Inflation Swap USD	1,700,000	1,700,000	U.S. CPI URNSA	2.07	7/15/2022	24,022
Inflation Swap USD	18,200,000	16,796,892	U.S. CPI URNSA	2.50	7/15/2022	(1,403,108)
Inflation Swap USD	8,550,000	8,550,000	U.S. CPI URNSA	2.21	2/5/2023	56,192
Inflation Swap USD	3,730,000	3,730,000	U.S. CPI URNSA	2.26	4/27/2023	4,601
Inflation Swap USD	2,100,000	1,939,503	U.S. CPI URNSA	2.56	5/8/2023	(160,497)
Inflation Swap USD	2,760,000	2,760,000	U.S. CPI URNSA	2.26	5/9/2023	5,037
Inflation Swap USD	4,230,000	4,230,000	U.S. CPI URNSA	2.28	5/10/2023	4,283
Inflation Swap USD	10,600,000	10,600,000	U.S. CPI URNSA	1.96	7/25/2024	305,855
Inflation Swap EUR	2,000,000	2,335,101	EMU HICP	1.71	3/15/2033	4,957
Inflation Swap GBP	1,450,000	1,732,580	UK Retail Price Index	3.59	10/15/2046	(181,784)
Inflation Swap GBP	3,230,000	4,264,409	UK Retail Price Index	3.43	3/15/2047	(15,377)
		$133,172,337				**($911,561)**

(continued)

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Asset Description	Par	Gross Notional	TRS Receives	TRS Pays	Maturity Date	Fair Value 6/30/18
Receive Fixed Inflation-Linked Swaps:						
Inflation Swap USD	9,400,000	$9,277,178	1.72%	U.S. CPI URNSA	7/18/2019	($122,822)
Inflation Swap USD	3,830,000	3,829,943	2.14	U.S. CPI URNSA	4/25/2020	(57)
Inflation Swap EUR	1,600,000	1,866,958	1.51	EMU HICP	6/26/2021	(1,123)
Inflation Swap EUR	5,010,000	5,822,403	1.35	France CPI ex-Tobacco Index	1/15/2023	(27,025)
Inflation Swap EUR	2,800,000	3,263,025	1.48	EMU HICP	5/15/2023	(6,117)
Inflation Swap EUR	6,600,000	7,708,883	1.54	EMU HICP	6/15/2023	3,050
Inflation Swap USD	11,200,000	11,027,709	2.06	U.S. CPI URNSA	5/12/2025	(172,291)
Inflation Swap USD	3,600,000	3,405,257	1.79	U.S. CPI URNSA	7/18/2026	(194,743)
Inflation Swap USD	2,900,000	2,749,628	1.81	U.S. CPI URNSA	7/19/2026	(150,372)
Inflation Swap USD	2,000,000	1,894,554	1.80	U.S. CPI URNSA	7/20/2026	(105,446)
Inflation Swap USD	1,700,000	1,599,029	1.73	U.S. CPI URNSA	7/26/2026	(100,971)
Inflation Swap USD	1,240,000	1,175,896	1.80	U.S. CPI URNSA	9/12/2026	(64,104)
Inflation Swap USD	1,500,000	1,418,996	1.78	U.S. CPI URNSA	9/15/2026	(81,004)
Inflation Swap USD	500,000	474,165	1.81	U.S. CPI URNSA	9/20/2026	(25,835)
Inflation Swap USD	3,000,000	2,916,712	2.09	U.S. CPI URNSA	7/17/2027	(83,289)
Inflation Swap USD	1,600,000	1,556,735	2.10	U.S. CPI URNSA	7/20/2027	(43,265)
Inflation Swap USD	4,600,000	4,464,736	2.08	U.S. CPI URNSA	7/25/2027	(135,264)
Inflation Swap USD	2,280,000	2,229,029	2.18	U.S. CPI URNSA	9/20/2027	(50,971)
Inflation Swap USD	2,300,000	2,241,198	2.15	U.S. CPI URNSA	9/25/2027	(58,802)
Inflation Swap USD	2,600,000	2,535,634	2.16	U.S. CPI URNSA	10/17/2027	(64,366)
Inflation Swap EUR	1,820,000	2,117,460	1.58	France CPI ex-Tobacco Index	1/15/2028	(7,482)
Inflation Swap USD	4,340,000	4,324,101	2.34	U.S. CPI URNSA	2/5/2028	(15,899)
Inflation Swap EUR	9,140,000	10,651,422	1.59	France CPI ex-Tobacco Index	2/15/2028	(19,989)
Inflation Swap EUR	1,280,000	1,494,250	1.61	France CPI ex-Tobacco Index	2/15/2028	(215)
Inflation Swap EUR	5,100,000	5,919,453	1.54	EMU HICP	3/15/2028	(35,054)
Inflation Swap USD	2,760,000	2,760,337	2.35	U.S. CPI URNSA	5/9/2028	337
Inflation Swap USD	4,150,000	4,153,496	2.36	U.S. CPI URNSA	5/9/2028	3,497
Inflation Swap USD	4,230,000	4,234,838	2.36	U.S. CPI URNSA	5/10/2028	4,838
Inflation Swap USD	3,200,000	3,200,022	2.37	U.S. CPI URNSA	6/6/2028	22
Inflation Swap GBP	2,100,000	2,840,294	3.35	UK Retail Price Index	5/15/2030	67,768
Inflation Swap GBP	5,200,000	7,072,423	3.40	UK Retail Price Index	6/15/2030	207,120
Inflation Swap GBP	8,700,000	11,608,879	3.33	UK Retail Price Index	8/15/2030	122,699
Inflation Swap GBP	1,900,000	2,498,521	3.30	UK Retail Price Index	12/15/2030	(9,955)
Inflation Swap GBP	4,310,000	5,856,122	3.53	UK Retail Price Index	10/15/2031	165,842
Inflation Swap GBP	4,060,000	5,457,964	3.47	UK Retail Price Index	9/15/2032	97,746
Inflation Swap GBP	4,600,000	6,179,831	3.36	UK Retail Price Index	4/15/2035	106,679
Inflation Swap EUR	1,510,000	1,781,012	1.91	France CPI ex-Tobacco Index	1/15/2038	18,011
Inflation Swap EUR	2,000,000	2,311,429	1.95	EMU HICP	3/15/2048	(23,672)
		$155,919,522				**($802,524)**

CDI - Cetip Interbank Deposit (interbank lending rate)
CPI - Consumer Price Index
EMU HICP - European Monetary Union Harmonized Index of Consumer Prices
EURIBOR - Euro Interbank Offered Rate
LIBOR - London Interbank Offered Rate
TELBOR - Tel Aviv 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, 2018, the aggregate fair value of non-exchange traded derivative instruments in asset positions was $132,944,316. All applicable futures, options and swaps are in compliance with Dodd-Frank requirements and cleared through the appropriate futures and swaps exchanges. The following counterparty risk exposure 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, 2018
Aa2	$4,676,823
Aa3	34,058,996
A1	43,126,028
A2	6,644,181
A3	37,840,827
Baa1	4,919,209
Baa2	1,239,825
Not rated	438,427
Total subject to credit risk	**$132,944,316**

Although the derivative instruments held within the TRS investment portfolio are executed with various counterparties, approximately 89 percent of the net market value exposure to credit risk is for non-exchange traded derivative contracts held with 10 counterparties.

5. INVESTMENT COMMITMENTS

Investments in certain limited partnerships commit TRS to possible future capital contributions. As of June 30, 2018, TRS had remaining unfunded commitments of $6,782,990,072 within the real estate, other real assets, private equity, diversifying strategies and global fixed income asset classes.

6. SCHEDULE OF INVESTMENT RETURNS

For the year ended June 30, 2018, the annual money-weighted rate of return on pension plan investments, net of investment expense, was 8.5 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.

7. FAIR VALUE MEASUREMENT

TRS categorizes investments measured at fair value within the fair value hierarchy established by generally accepted accounting principles. The hierarchy prioritizes valuation inputs used to measure the fair value of the asset or liability into three broad categories. The inputs or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities. Levels 1, 2 and 3 (lowest priority level) of the fair value hierarchy are defined as follows:

Level 1 Inputs using unadjusted quoted prices in active markets or exchanges for identical assets and liabilities.

Level 2 Significant other observable inputs, which may include quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in non-active markets; and inputs other than quoted prices that are observable for the assets or liabilities, either directly or indirectly.

Level 3 Valuations for which one or more significant inputs are unobservable and may include situations where there is minimal, if any, market activity for the investment.

If the fair value is measured using inputs from different levels in the fair value hierarchy, the measurement should be categorized based on the lowest priority level input that is significant to the valuation. The System's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgement and considers factors specific to the investment. Investments measured at fair value using net asset value (NAV) per share (or equivalent) as a practical expedient to fair value are not classified in the fair value hierarchy; however, separate disclosures for these investments are required.

Debt and equity investments classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets, to the extent these securities are actively traded.

Short-term investments consisting of money market funds, certificates of deposit and highly liquid cash equivalents are generally reported at amortized cost which approximates fair market value. These investments are not categorized in the fair value hierarchy.

Debt and investment derivatives classified in Level 2 of the fair value hierarchy are normally valued based on price data obtained from observed transactions and market price quotations from broker dealers and/or pricing vendors. Valuation estimates from service providers' internal models use observable inputs such as interest rates, yield curves, credit/risk spreads and default rates. Matrix pricing techniques value securities based on their relationship to benchmark quoted prices. Exchange traded and over-the-counter investment derivatives valued by independent pricing service providers, where the value is derived from underlying asset prices, reference rates, indices or other observable inputs are also included in Level 2.

Debt securities classified as Level 3 include valuations using significant unobservable inputs, valuations using proprietary information, inputs that cannot be corroborated by observable market data and securities valued with last trade date due to limited trading volume. Real assets classified as Level 3 include direct investments in real estate. Valuations for real estate investments are performed quarterly by investment managers. An appraisal by an independent third party member of the Appraisal Institute is obtained once every three years for each property and is used to establish fair market value.

The following table summarizes the valuation of TRS investments by the fair value hierarchy levels as of June 30, 2018.

Investments and Derivative Instruments Measured at Fair Value ($ thousands)

		Fair Value Measurements Using		
	June 30, 2018	**Quoted Prices in Active Markets for Identical Assets Level 1**	**Significant Other Observable Inputs Level 2**	**Significant Unobservable Inputs Level 3**
Investments by fair value level				
Debt securities				
Asset-backed securities	$497,438	$ -	$494,002	$3,436
Commercial and collateralized mortgages	282,315	-	282,315	-
Domestic corporate obligations	2,741,853	-	2,741,853	-
Fixed income mutual funds	326,769	326,769	-	-
Foreign debt/corporate obligations	2,646,843	-	2,636,192	10,651
Municipals	46,548	-	46,548	-
U.S. agencies obligations	86,288	-	86,288	-
U.S. government-backed mortgages	679,749	-	679,749	-
U.S. treasuries	1,648,604	-	1,648,604	-
Total debt securities	**8,956,407**	**326,769**	**8,615,551**	**14,087**
Equity investments				
International common and preferred stock	10,109,996	10,106,518	3,478	-
U.S. common and preferred stock	7,792,089	7,778,286	13,803	-
Total equity investments	**17,902,085**	**17,884,804**	**17,281**	**-**
Real assets				
Real estate	5,015,068	-	-	5,015,068
Total real assets	**5,015,068**	**-**	**-**	**5,015,068**
Total investments by fair value level	**$31,873,560**	**$18,211,573**	**$8,632,832**	**$5,029,155**
Investments measured at the Net Asset Value (NAV)				
Commingled fixed income funds	$3,181,686			
Diversifying strategies	5,855,618			
International equity commingled fund	305,511			
Private equity partnerships	6,788,647			
Private real estate partnerships	2,220,493			
Other real assets	464,051			
Total investments measured at the NAV	**18,816,006**			
Total investments measured at fair value	**$50,689,566**			
Investment derivative instruments				
Credit default swaps	$14	$ -	$14	$ -
Index and variance swaps	(1,988)	-	(1,988)	-
Inflation swaps	(1,714)	-	(1,714)	-
Interest rate swaps	40,388	-	40,388	-
Options	(857)	-	(857)	-
Swaptions	(3,623)	-	(3,623)	-
Total investment derivative instruments	**$32,220**	**$ -**	**$32,220**	**$ -**
Invested securities lending collateral				
Total invested securities lending collateral*	**$2,248,613**	**$153,657**	**$2,094,956**	**$ -**

** Does not include lending collateral with the State Treasurer.*

Investments measured at NAV for fair value are not subject to level classification. The valuation method for investments measured at the NAV per share (or its equivalent) is presented on the following table.

Investments Measured at the Net Asset Value (NAV) ($ thousands)

	Fair Value June 30, 2018	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Diversifying funds - liquid[1]	$5,666,002	$ -	Daily, weekly, monthly, quarterly	1 - 90 days
Diversifying funds - illiquid[2]	189,616	257,103	Not eligible	N/A
Total diversifying strategies	**5,855,618**	**257,103**		
Commingled fixed income funds[3]	1,850,768	-	Monthly, quarterly	30-65 days
Fixed income private debt funds[4]	1,330,918	853,992	Not eligible	N/A
Total commingled fixed income funds	**3,181,686**	**853,992**		
International equity commingled fund[5]	**305,511**	**-**	Daily	1 day
Private equity partnerships[6]	**6,788,647**	**3,595,289**	Not eligible	N/A
Private real estate partnerships[6]	**2,220,493**	**1,906,680**	Not eligible	N/A
Real return fund[7]	331,221	-	Monthly	30 days
Real assets partnerships[8]	132,830	169,926	Not eligible	N/A
Total other real assets	**464,051**	**169,926**		
Total investments measured at the NAV	**$18,816,006**	**$6,782,990**		

1) **Diversifying funds (liquid strategies):** The diversifying strategies asset class applies various strategies that provide diversification to the total investment portfolio. Investments focus on reducing equity-like risk characteristics encompassed in the overall TRS portfolio by enhancing exposures to strategies that show little to no correlation to growth factors while adding positive skew and active risk management characteristics. Risk parity and alternative risk premia strategies consists of five direct investments focusing on market neutral and long only expressions of cross-asset risk. The systematic and discretionary macro strategies include direct investments in 11 funds diversifying through regional and product expertise, speed of algorithms and style of trading. Opportunistic alpha funds, including five direct investments and two diversified fund of funds, use idiosyncratic alpha capture through liquidity and security selection. The fair value of these investments has been determined using the NAV per share of the investments. The strategies maintain a liquidity profile of less than one year, ranging from daily to quarterly and require advance notice prior to redemption. TRS submitted redemption request for one fund, valued at $316,064, and completely exited on Aug. 1, 2018.

2) **Diversifying funds (illiquid strategies):** The diversifying strategies asset class also includes three opportunistic alpha funds in which redemptions are restricted over the life of the partnership. The partnership's interest is valued using the NAV per share (or its equivalent). The most significant element of NAV is the fair value of the underlying investment holdings which are valued on a monthly basis by the general partner and are audited annually. The average life of these funds span five to 10 years and the funds will distribute any free cash from the master fund in excess of the amount needed to maintain prudent liquidity. TRS has no plans to liquidate as of June 30, 2018.

3) **Commingled fixed income funds:** The investment strategies for the eight fixed income funds include high yield, defensive bond arbitrage, emerging market debt, relative value and TRS customized accounts investing in opportunistic investments. The fair value of the investments has been determined using the NAV per share

(or its equivalent) of the investments. Liquidity ranges from monthly to quarterly upon notice of redemption and TRS has no plans to liquidate as of June 30, 2018.

4) **Fixed income private debt funds:** Private debt funds consist of 27 funds investing across strategies such as stressed debt/credit, direct lending, specialty finance, real estate debt and bank loans. These funds provide additional exposure to niche and/or specific non-traditional point-in-time opportunities that are not normally targeted by traditional fixed income managers. Funds are valued using the NAV per share (or its equivalent) and are audited annually. Redemption restrictions are in place over the life of the partnership. The average life of these funds span one to 10 years and distributions are received throughout the life of the fund. TRS has no plans to liquidate as of June 30, 2018, however; three of the funds, with fair value of $66.5 million, are approaching the end of the partnership term, winding down and distributing cash as the funds sell underlying investments.

5) **International equity commingled fund:** Includes one fund investing in emerging market small cap equities diversified across multiple sectors. The fair value of the investment has been determined using the NAV per share of the investments. Daily liquidity is available.

6) **Private equity and real estate partnerships:** TRS has 193 private equity partnerships which include investments in privately held equity, such as buyouts, co-investments, venture capital and growth equity as well privately held debt. The 48 real estate limited partnerships invest in various property types across multiple geographic regions. Investments in limited partnerships are normally long-term with an approximate life of 10 to 12 years and considered illiquid. Investors are subject to redemption restrictions which limit and restrict the ability of limited partners to exit prior to dissolution. Partnership interests are valued using their respective NAV calculated by the general partner's fair valuation policy and are generally audited annually. The most significant element of NAV is the fair value of the investment holdings which are typically valued on a quarterly basis by the general partners. Distributions are received as the funds sell underlying portfolio company investments. TRS has no plans on liquidating the portfolio, however will opportunistically sell funds in the secondary market to reposition the portfolio and optimize returns. During the fiscal year, TRS sold 21 private equity funds on the secondary market. As of June 30, 2018, it is probable that all investments in this type will be sold at an amount different from the current NAV of the Plan's ownership interest.

7) **Real return fund:** TRS holds one multi-strategy real return fund that targets assets that hedge inflation while mitigating extraneous risks, such as equities and real rates. The fund allows monthly redemptions with notice and the partnership's interest is valued using the NAV per share (or its equivalent). The most significant element of NAV is the fair value of the underlying securities which are valued on a monthly basis by the general partner. TRS has no plans to liquidate this fund as of June 30, 2018.

8) **Real assets partnerships:** Real assets strategies include three limited partnerships investing in global infrastructure, direct energy and non-U.S. agriculture. These partnerships are not eligible for redemption, considered illiquid and have an approximate life of 10 to 15 years. Distributions are received during the life of the fund as underlying investments are liquidated. Partnership interests are valued by the general partner using their respective NAV per share (or equivalent), with the most significant element of NAV being the fair value of the investment holdings. TRS has no plans to liquidate these funds. As of June 30, 2018, it is probable that all investments in this type will be sold at an amount different from the current NAV of the plan's ownership interest.

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

	2018
Balances at June 30	$51,960,392,797

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 $75.3 billion in FY18, based on the actuarial value of assets.

2. MINIMUM RETIREMENT ANNUITY

	2018
Balances at June 30	$9,153,897

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 an amount based on factors such as date of retirement, years of credited service with the State of Illinois, 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 Jan. 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 Jan. 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 their last day of employment until age 60, at which time the benefit becomes $5,000.

The State of Illinois 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 System adopted GASB 75 during the current year, but has chosen not to record the other post-retirement liability because it is deemed insignificant to the financial statements. The footnote and required supplementary information also required by GASB 75 have been excluded, as well, due to the insignificance of the liability.

A summary of post-employment benefit provisions, changes in benefit provisions and 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 contacting 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:

	2018	2017	2016	2015	2014
Total pension liability					
Service cost	$1,838,002,948	$1,877,570,053	$1,681,242,232	$1,948,079,771	$1,894,351,211
Interest	8,703,519,454	8,390,352,464	8,264,257,311	7,864,916,421	7,561,104,814
Changes of benefit terms	(374,603,419)	-	-	-	-
Difference between expected and actual experience	1,191,346,970	482,486,212	701,827,169	(90,079,446)	39,950,212
Change of assumptions	(666,054,719)	(2,725,599,755)	7,553,894,504	1,136,454,886	-
Benefit payments, including refund of member contributions	(6,551,634,376)	(6,438,005,920)	(5,931,207,177)	(5,625,037,173)	(5,320,662,979)
Net change in total pension liability	4,140,576,858	1,586,803,054	12,270,014,039	5,234,334,459	4,174,743,258
Total pension liability - beginning	125,773,806,438	124,187,003,384	111,916,989,345	106,682,654,886	102,507,911,628
Total pension liability - ending (a)	129,914,383,296	125,773,806,438	124,187,003,384	111,916,989,345	106,682,654,886
Plan fiduciary net position					
Contributions - employer	84,633,117	149,495,577	148,040,767	145,591,585	158,334,598
Contributions - nonemployer contributing entity	4,095,125,358	3,986,363,699	3,742,469,245	3,377,664,945	3,438,382,892
Contributions - member	938,037,245	929,130,165	951,809,398	935,451,049	928,745,853
Net investment income (loss)	4,049,271,728	5,520,453,001	(44,103,178)	1,770,549,533	6,782,031,720
Benefit payments, including refund of member contributions	(6,551,634,376)	(6,438,005,920)	(5,931,207,177)	(5,625,037,173)	(5,320,662,979)
Administrative expense	(21,550,896)	(22,728,735)	(22,967,917)	(21,686,860)	(21,218,069)
Net change in plan fiduciary net position	2,593,882,176	4,124,707,787	(1,155,958,862)	582,533,079	5,965,614,015
Plan fiduciary net position - beginning	49,375,664,518	45,250,956,731	46,406,915,593	45,824,382,514	39,858,768,499
Plan fiduciary net position - ending (b)	51,969,546,694	49,375,664,518	45,250,956,731	46,406,915,593	45,824,382,514
Employers' net pension liability - ending (a) - (b)	**$77,944,836,602**	**$76,398,141,920**	**$78,936,046,653**	**$65,510,073,752**	**$60,858,272,372**

Schedule of the Net Pension Liability for Fiscal Years:

	2018	2017	2016	2015	2014
Total pension liability	$129,914,383,296	$125,773,806,438	$124,187,003,384	$111,916,989,345	$106,682,654,886
Plan fiduciary net position	51,969,546,694	49,375,664,518	45,250,956,731	46,406,915,593	45,824,382,514
Net pension liability	**$77,944,836,602**	**$76,398,141,920**	**$78,936,046,653**	**$ 65,510,073,752**	**$60,858,272,372**
Plan fiduciary net position as a percentage of the total pension liability	40.0%	39.3%	36.4%	41.5%	43.0%
Covered payroll	$10,163,980,000	$9,965,569,893	$9,811,614,284	$9,641,170,627	$9,512,809,680
Net pension liability as a percentage of covered payroll	766.9%	766.6%	804.5%	679.5%	639.8%

Schedule of Investment Returns for Fiscal Years:

	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expense	8.5%	12.5%	(0.1%)	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)

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Actuarially-determined contribution (ADC)	$7,080,756	$6,248,879	$4,582,530	$4,119,526	$4,091,978	$3,582,033	$3,429,945	$2,743,221	$2,481,914	$2,109,480
Contributions in relation to the actuarially-determined contribution:*										
State	4,094,616	3,985,783	3,741,802	3,376,878	3,437,478	2,702,278	2,405,172	2,169,518	2,079,129	1,449,889
Federal & Employer Contributions	84,034	148,749	147,408	144,780	157,228	155,787	153,409	154,150	170,653	151,716
Total contributions	4,178,650	4,134,532	3,889,210	3,521,658	3,594,706	2,858,065	2,558,581	2,323,668	2,249,782	1,601,605
Contribution deficiency	**$2,902,106**	**$2,114,347**	**$693,320**	**$597,868**	**$497,272**	**$723,968**	**$871,364**	**$419,553**	**$232,132**	**$507,875**
Covered payroll	$10,163,980	$9,965,570	$9,811,614	$9,641,171	$9,512,810	$9,394,741	$9,321,098	$9,205,603	$9,251,139	$8,945,021
Contributions as a percentage of covered payroll	41.1%	41.5%	39.6%	36.5%	37.8%	30.4%	27.4%	25.2%	24.3%	17.9%

** Contributions for minimum benefits from the state and for excess sick from employers do not count towards actuarial funding requirements. Employer ERO contributions have been included since FY08 because the costs of the ERO program were included in the actuarial accrued liability. Beginning in FY18, employer contributions on salaries exceeding the statutory salary of the governor are included and the projected excess salary contribution is included in the ADC. In all years, employer contributions for excess salary increases are included. However, employer contributions for excess sick leave are not included because there is no assumption for excess sick leave and it is not included in the funding requirements. Before FY17, the actuarially determined contribution was based on GASB Statement No. 25. Beginning in FY17, a different basis for determining the actuarially-determined contribution is used, as described in the table below.*

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

The Schedule of Changes in Net Pension Liability and the Schedule of Net Pension Liability are affected by various factors. In FY18, they increased the total pension liability by $4.1 billion.

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 FY18:

	For Funding per State Statute	For Determining the Actuarially-determined Contribution
Valuation Used to Determine Funding Amount:	June 30, 2016	June 30, 2016
Actuarial Cost Method:	Projected unit credit	Entry age normal
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:	27 years, closed	20 years, closed beginning with 2015 actuarial valuation; subsequent increases in the UL amortized over subsequent 20-year periods.
Asset Valuation Method:	Actuarial value of assets	Actuarial value of assets

OTHER SUPPLEMENTARY INFORMATION

SCHEDULE OF ADMINISTRATIVE EXPENSES
FOR THE YEARS ENDED JUNE 30

	2018	2017
Personnel services		
Salaries	$10,346,412	$10,404,585
Retirement contributions	2,030,511	2,252,254
Insurance and payroll taxes	3,408,592	3,895,930
	15,785,515	16,552,769
Professional services		
Actuarial services	267,156	335,184
External auditors	269,125	271,721
Legal services	174,288	92,046
Legislative consulting	84,000	84,000
Information systems consulting	844,845	581,348
Operations consulting	233,466	327,378
Other	6,748	6,408
	1,879,628	1,698,085
Communications		
Postage	165,325	224,811
Printing and copying	202,744	202,691
Telephone	163,494	153,501
	531,563	581,003
Other services		
Administrative services	270,677	559,658
Building operations and maintenance	500,749	522,454
EDP supplies and equipment	95,747	174,547
Equipment repairs, rental and maintenance	219,130	260,714
Insurance	304,757	301,037
Memberships and subscriptions	96,130	69,845
Office equipment and furniture	29,458	29,797
Office supplies	19,398	22,270
Software licenses and maintenance	659,828	682,065
Travel, conferences, education	209,816	208,506
	2,405,690	2,830,893
Depreciation expense	948,500	1,065,985
Total administrative expenses	**$21,550,896**	**$22,728,735**

Note: Above amounts do not include investment administrative expenses, which are deducted from investment income and shown in a separate schedule on the following page.

SCHEDULE OF INVESTMENT EXPENSES
FOR THE YEARS ENDED JUNE 30

	2018	2017
Investment manager fees	$350,149,552	$317,305,576
Master custodian fees		
State Street Bank and Trust Company	2,531,250	2,100,000
Consulting services		
Albourne America, L.L.C.	416,000	400,000
Courtland Partners, Ltd.	208,944	271,817
RVK, Inc.	457,646	444,316
Stepstone Group Real Estate, L.P.	71,027	-
Stout Risius Ross, Inc.	-	90,000
Tave and Associates, L.L.C.	15,000	15,000
TorreyCove Capital Partners, L.L.C.	997,500	1,025,792
	2,166,117	2,246,925
Legal services		
DLA Piper, L.L.P.	123,767	-
Jackson Walker, L.L.P.	253,292	439,222
	377,059	439,222
Tax advisory services		
Ernst & Young Private, Ltd.	75,482	72,859
Other investment expense		
Auditing costs	63,430	103,850
Communication services	30,311	42,997
Dividend expense	3,190,912	2,438,405
Education, meetings and travel	153,678	79,239
Foreign tax expense	18,064,442	15,504,509
Investment activity expenses	2,298,273	3,135,585
Investment analytical systems	1,116,671	1,153,856
Personnel costs	4,974,888	4,850,992
Research, subscriptions and memberships	81,407	81,744
Other costs	83,141	93,842
	30,057,153	27,485,019
Total investment expenses	**$385,356,613**	**$349,649,601**

Note: Investment manager fee detail is shown on pages 84 to 86.

SCHEDULE OF PROFESSIONAL SERVICES
FOR THE YEARS ENDED JUNE 30

	2018	2017
Actuarial services		
The Segal Company Midwest, Inc.	$267,156	$335,184
External auditors		
Office of the Auditor General (BKD, L.L.P.)	269,125	271,721
Legal services		
Cavanagh & O'Hara	8,414	21,466
Holland & Knight, L.L.P.	33,080	26,586
Howard & Howard Attorneys, P.L.L.C.	5,406	13,645
Kopec White & Spooner	28,640	17,597
Loewenstein & Smith, P.C.	12,189	12,752
Reinhart Boerner Van Deuren	85,822	-
Whitt Law, L.L.C.	737	-
	174,288	92,046
Legislative consulting		
Leinenweber Baroni & Daffada Consulting, L.L.C.	84,000	84,000
Information systems consulting		
Advanced Design Management Group, L.L.C.	37,864	-
Agile Progress, L.L.C.	528,769	346,996
AT&T Corporation	1,440	3,360
AT&T Mobility II, L.L.C. Total	-	1,500
Capitol Strategies Consult, Inc.	16,813	4,156
Corporate Software Services, Inc.	-	8,400
DLT Mergerco, L.L.C.	-	22,469
HSO Corporation	208,995	-
Icon Integration & Design, Inc.	-	2,500
LRWL, Inc.	-	15,000
NetSight, Inc.	-	2,417
ProCircular, Inc.	8,000	-
Promet Solutions Corporation	28,343	94,288
Sentinel Technologies, Inc.	14,621	9,500
Towerwall, Inc.	-	65,227
	844,845	575,813
Operations consulting		
CEM Benchmarking, Inc.	45,000	45,000
Darlington & Company, Inc.	43,347	35,700
Foley & Lardner, L.L.P.	-	19,950
Graham & Hyde	3,042	-
Higher Logic, L.L.C. (formerly known as Real Magnet, L.L.C.)	15,971	5,535
Holland, William G.	500	-
Jasculca Terman Strategic Communications	70,000	130,000
Levi Ray & Shoup, Inc.	16,814	28,823
Management Association	10,313	26,155
SABA Software	8,479	-
Segal Waters Public Sector	20,000	20,000
Sikich Gardner & Co, L.L.P.	-	21,750
	233,466	332,913
Other	6,748	6,408
Total professional services	**1,879,628**	**$1,698,085**

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INVESTMENTS

EDUCATION, SCIENCE & DISCOVERY

1818 – A state law was enacted to require public schools to receive money from public land sales.

1828 – McKendree University in Lebanon, the oldest continually operating college in Illinois, was founded as Lebanon Seminary.

1835 – Illinois College, founded in 1829 in Jacksonville, granted the first college degrees in Illinois.

1851 – West District School in Jacksonville was opened and was the first in Illinois to establish a "high school department."

1855 – The General Assembly created a system of free public schools throughout Illinois.

1856 – Peoria High School founded.

1857 – Illinois State Normal University (Illinois State University) founded in Bloomington-Normal.

1867 – The Illinois Industrial University (University of Illinois) was founded in Urbana-Champaign.

1869 – Southern Illinois Normal University (Southern Illinois University) was founded in Carbondale.

1870 – The third Illinois Constitution required a free public education for all residents and created a State Board of Education.

1883 – Illinois enacted the first state law requiring compulsory school attendance.

1893 – Daniel Hale Williams performed the world's first open-heart surgery at Provident Hospital in Chicago.

1895 – Northern Illinois State Normal School (Northern Illinois University) founded in DeKalb.

1895 – Eastern Illinois State Normal School (Eastern Illinois University) founded in Charleston.

1899 – Western Illinois State Normal School (Western Illinois University) was founded in Macomb.

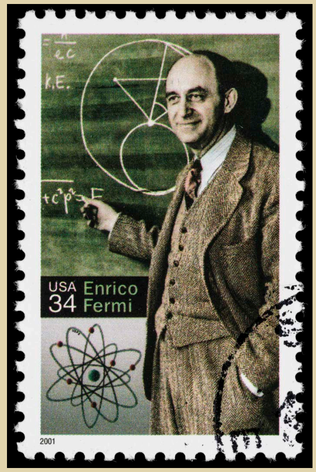
1901 – Joliet Junior College, the nation's oldest continually operating community college, was established.

1915 – The Illinois State Teachers' Pension and Retirement Fund was created.

1930 – The Adler Planetarium, the first in the western Hemisphere, opened in Chicago.

1939 – The Teachers' Retirement System of the State of Illinois replaced the Illinois State Teachers' Pension and Retirement Fund.

1942 – The world's first controlled nuclear chain reaction was created by Enrico Fermi's team at the University of Chicago.



Fermi's team created the First controlled nuclear chain reaction at the University of Chicago.

Altgeld Hall is located at the University of Illinois Champaign-Urbana.

Pleasant Grove School, a one-room school house, was built in 1856 in Peoria County.

INTRODUCTION

The TRS trust fund is invested by authority of the Illinois Pension Code under the "prudent person rule," requiring investments to be managed solely in the interest of fund participants and beneficiaries. The TRS Investment Policy guides TRS's investments. Investment principles include preserving the long-term principal of the trust fund, maximizing total return within prudent risk parameters and acting in the exclusive interest of TRS members.

The TRS investment portfolio increased $2.9 billion over the past 12 months, ending with a value of $52.1 billion on June 30, 2018. The TRS portfolio remains fully diversified across different asset classes. Within each asset class, TRS utilizes a number of investment managers with various investment styles to ensure appropriate diversification, allowing the portfolio to achieve broad exposure to the market while minimizing overall risk. This broad diversification serves as the best defense against the uncertainty of volatile global markets.

Global financial markets continued to experience modest growth, low financial volatility and tepid inflation for the fiscal year ended June 30, 2018. The System's global equities portfolio, including public and private assets, took advantage of these market conditions during the year by generating 12.8 percent, net of fee returns. All asset classes produced positive returns, contributing to the overall TRS portfolio posting a return of 8.5 percent, net of fees, for the fiscal year ended June 30, 2018.

State Street Bank and Trust, as master trustee, has provided TRS a statement of detailed assets, along with their fair value as of June 30, 2018. State Street Bank and Trust has also provided detailed financial reports of all investments, receipts, disbursements, purchases and sales of securities and other transactions pertinent to the fund for FY18. TRS investment consultants have also contributed key investment portfolio data and analysis during the fiscal year and throughout the investment process.

Investment performance calculations use time-weighted rate of return. State Street Bank and Trust calculates returns using industry best practices. Additionally, State Street Bank and Trust calculates performance rates of return by portfolio, composite and for all respective indices used throughout this section. The TRS investment staff, in collaboration with the staff of its custodian, prepared the Investments section.

A complete listing of investment holdings is available upon request.

Summary Data as of June 30, 2018	
Total fund fair value	$52.1 billion
1-year return (net of fees)	8.5%
3-year return (net of fees)	6.9%
5-year return (net of fees)	8.3%
10-year return (net of fees)	6.2%
20-year return (net of fees)	6.6%
30-year return (net of fees)	8.3%
Percent externally managed	100.0%
Number of external managers	164
Master Trustee and Custodian	State Street Bank and Trust Company
General consultant	RVK, Inc.

TRS is the 40th largest pension system in the United States according to *Pensions & Investments.* Rankings are based on the fair value of total assets as of Sept. 30, 2017.

ASSET ALLOCATION

A pension fund's most important investment policy decision is the selection of its asset allocation. Similar to other large institutional funds, TRS maintains a well-diversified portfolio to manage risk effectively. The TRS Board of Trustees adopts long-term strategic allocation targets to be implemented over several years. Recognizing the prudence of making measured movement toward long-term targets, the board also sets interim targets for shorter periods.

During FY18, TRS focused on implementing the asset allocation structure adopted by the board in June 2017 (effective July 1, 2017). This implementation solidifies the previously adopted asset class structure and seeks to continue minor allocation changes, balancing private and public capital, improving diversification, managing liquidity and enhancing the overall portfolio risk/return profile. The 2017 study established new targets for the continued diversification of the fund by modestly reducing the long-term allocation to diversifying strategies, accompanied by slight increases to the income and real assets classes in order to balance diversification and defensive capture. Further rebalancing within the equity class resulted in a gradual reduction in exposure to publicly-traded equity securities, with corresponding increases to private equity and opportunistic real estate in an effort to enhance return.

TRS periodically compares the asset mix to the policy targets to determine when rebalancing of the fund or changes to the interim policy targets are necessary. The following Strategic Investment Listing table shows the asset allocation targets, as adopted by the TRS Board of Trustees, compared to the total assets assigned to each particular asset class at June 30, 2018.

Strategic Investment Listing
Allocation Targets vs. Total Assets

	As of June 30, 2018				As of June 30, 2017	
Asset Class	Total Fund $ (Million)	Actual Percent	Interim Target	Long-term Target	Actual Percent	Long-term Target
Public equity	$18,511.6	35.9%	36.0%	34.0%	36.5%	36.0%
Private equity	6,792.6	13.2	12.0	15.0	13.2	14.0
Real estate (opportunistic)	1,445.5	2.8	3.0	5.0	3.1	4.0
Total Equity	**26,749.7**	**51.9**	**51.0**	**54.0**	**52.8**	**54.0**
Real estate (core - value add)	5,790.6	11.2	11.0	11.0	11.4	11.0
Other real assets	1,253.7	2.5	4.0	4.0	2.3	3.0
Total Real Assets	**7,044.3**	**13.7**	**15.0**	**15.0**	**13.7**	**14.0**
Total Diversifying Strategies	**5,864.1**	**11.4**	**13.0**	**14.0**	**12.0**	**16.0**
Global fixed income	10,692.0	20.7	20.0	17.0	19.5	16.0
Short-term	1,181.1	2.3	1.0	-	2.0	-
Total Income	**11,873.1**	**23.0**	**21.0**	**17.0**	**21.5**	**16.0**
Pending settlements/expenses*	**539.7**	N/A	N/A	N/A	N/A	N/A
Total TRS Fund	$52,070.9	100.0%	100.0%	100.0%	100.0%	100.0%

Sources: State Street Bank and Trust and TRS

** This amount is included within the liability section in the Statement of Fiduciary Net Position.*

PORTFOLIO SECURITIES SUMMARY

The Portfolio Securities Summary table contains a detailed list of security types. The amounts in this table differ from the allocation percentages shown in the previous Strategic Investment Listing table. The Strategic Investment Listing represents assets assigned to managers within each asset class, whereas the Portfolio Securities Summary represents specific types of financial instruments; thus, the types of investments a manager holds explains the principal difference. For example, cash and currency held within a manager's portfolio are categorized according to the manager's primary assignment on the Strategic Investment Listing. However, in the Portfolio Securities Summary, these investments are categorized as cash and/or foreign currency.

Portfolio Securities Summary for the Years Ended June 30

	2018		2017	
	Fair Value	% of Total	Fair Value	% of Total
U.S. treasuries & agencies	$1,734,891,964	3.3%	$1,828,452,667	3.7%
U.S. government-backed mortgages	679,749,043	1.3	424,274,294	0.9
Municipals	46,548,126	0.1	47,376,605	0.1
Asset-backed securities	497,437,541	1.0	284,798,620	0.6
Commercial & collateralized mortgages	282,315,363	0.5	242,180,724	0.5
Commingled funds (U.S. & international)	3,508,455,165	6.7	2,881,748,706	5.9
Domestic corporate obligations	2,741,852,675	5.3	2,472,266,406	5.0
Foreign debt/corporate obligations	2,646,843,261	5.1	2,371,084,926	4.8
Total fixed income	**12,138,093,138**	**23.3**	**10,552,182,948**	**21.5**
U.S. equities	7,792,088,707	15.0	7,166,934,005	14.5
International equities	10,415,507,298	20.0	10,313,709,230	21.0
Total public equities	**18,207,596,005**	**35.0**	**17,480,643,235**	**35.5**
Diversifying strategies	5,855,617,530	11.2	5,871,043,153	11.9
Private equity	6,788,646,545	13.0	6,439,749,203	13.1
Real estate	7,235,561,047	13.9	7,090,551,234	14.4
Other real assets	464,051,207	0.9	437,540,238	0.9
Total alternative investments	**20,343,876,329**	**39.0**	**19,838,883,828**	**40.3**
Derivatives	32,220,547	0.1	3,427,917	-
Short-term investments	1,280,712,915	2.5	1,223,393,259	2.5
Foreign currency	68,446,828	0.1	81,744,713	0.2
TRS total portfolio	**$52,070,945,762**	**100.0%**	**$49,180,275,900**	**100.0%**

Sources: State Street Bank and Trust and TRS

SECURITIES HOLDINGS (HISTORICAL)

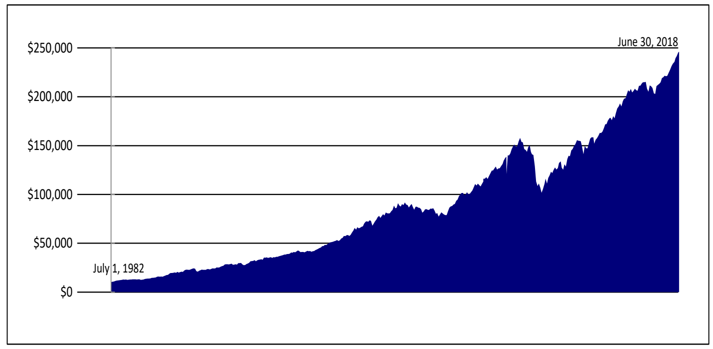
Historically, TRS has adopted various asset allocation strategies. The Securities Holdings table shows the actual asset allocation based on asset types for the last five-year period.

TRS's asset allocation has provided consistent overall returns throughout the years, as represented by the following chart showing the growth of $10,000 since July 1, 1982.

Securities Holdings for the Years Ended June 30

Asset Type	2018	2017	2016	2015	2014
Fixed income	23.3%	21.5%	21.7%	18.8%	18.5%
Public equities	35.0	35.5	35.2	40.1	42.1
Diversifying strategies	11.2	11.9	12.6	13.4	11.7
Private equity	13.0	13.1	12.0	11.5	11.1
Real estate	13.9	14.4	15.2	13.6	12.4
Other real assets	0.9	0.9	0.7	0.6	0.8
Short-term/ currency/ derivatives	2.7	2.7	2.6	2.0	3.4
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Growth of $10,000



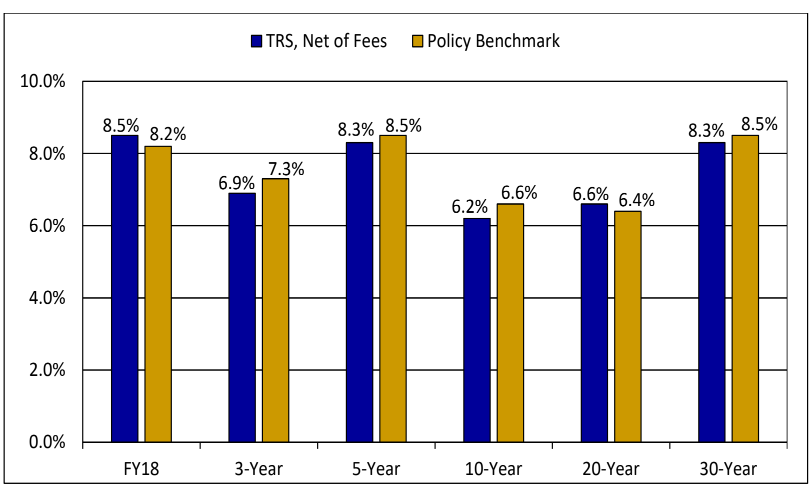
INVESTMENT RESULTS

As of June 30, 2018, the fair value of TRS's investments as reported on the Statement of Fiduciary Net Position was $52.1 billion, an increase of $2.9 billion from prior year. TRS had a total fund annualized return of 9.2 percent, gross of fees and 8.5 percent, net of fees, for the one-year period ended June 30, 2018.

The Performance Summary chart and table summarize total fund and asset class performance versus comparative benchmarks. As illustrated, the TRS total fund outperformed the policy index by 30 basis points for the year ended June 30, 2018. The TRS policy index represents a weighted average of each asset class benchmark, based on the total fund's interim target asset allocation. The fund's total return also outperformed the 7.0 percent actuarial return assumption and the real rate of return expectation, which is to exceed the rate of inflation, as measured by the Consumer Price Index, by 4.5 percentage points.

Total Fund Performance Summary (net of fees)

TRS Total Fund vs. Policy Benchmark



Sources: State Street Bank and Trust and TRS

Asset Class Performance Summary (net of fees)

Asset Class/Index	Years ended June 30					Annualized at 6/30/18		
	2018	2017	2016	2015	2014	3 Years	5 Years	10 Years
TRS total fund	**8.5%**	**12.6%**	**0.01%**	**4.0%**	**17.4%**	**6.9%**	**8.3%**	**6.2%**
TRS weighted policy index*	8.2	11.4	2.4	4.6	16.4	7.3	8.5	6.6
Equity	**12.8**	**19.8**	**(3.3)**	**3.5**	**23.3**	**9.3**	**10.8**	**7.6**
TRS equity composite benchmark [1]	12.7	19.4	(1.4)	3.7	24.3	9.9	11.3	8.1
Real assets	**6.2**	**5.2**	**11.4**	**8.5**	**12.0**	**7.5**	**8.6**	**4.1**
TRS real asset composite benchmark [2]	7.4	6.9	9.5	11.0	10.2	7.9	9.0	6.2
Diversifying strategies	**4.5**	**3.5**	**(2.4)**	**2.4**	**10.8**	**1.8**	**3.7**	**3.3**
TRS diversifying composite benchmark [3]	5.4	5.5	5.1	4.6	5.7	5.3	5.2	5.3
Income	**2.0**	**5.8**	**2.9**	**3.2**	**7.6**	**3.6**	**4.3**	**6.2**
TRS income composite benchmark [4]	(0.3)	(0.3)	5.7	1.8	4.1	1.7	2.2	3.5

** Policy index and TRS benchmarks represent weighted average of asset class benchmarks and interim target allocations.*
Sources: State Street Bank and Trust and TRS
Note: Performance calculations provided by State Street Bank and Trust use net-of-fee time-weighted rates of return.

1. *Equity composite includes the following asset classes and corresponding benchmarks:*

Asset Class	***Benchmark***
Public equity	*MSCI ACWI (All Country World Index)*
Private equity	*Russell 3000 Index + 3.0%*
Real estate opportunistic	*NCREIF Property Index*

2. *Real Assets composite includes the following asset classes and corresponding benchmarks:*

Asset Class	***Benchmark***
Real estate core & value add	*NCREIF Property Index*
Other real assets	*CPI (inflation) + 5.0%*

3. *Diversifying strategies composite includes the following asset classes and corresponding benchmarks:*

Asset Class	***Benchmark***
Diversifying strategies	*BofA Merrill Lynch 3 Month Treasury Bill + 4.0%*

4. *Income composite includes the following asset classes and corresponding benchmarks:*

Asset Class	***Benchmark***
Global fixed income	*Bloomberg Barclays Aggregate Bond Index*
Short-term investments	*BofA Merrill Lynch 91-day Treasury Bill Index*

The following sections provide a brief and informative overview of the assets held by TRS for the period ended June 30, 2018.

EQUITY

TRS's equity asset class broadly includes investments in global public equity securities, private equity investments and opportunistic real estate strategies. As of June 30, 2018, the asset class represented 51.9 percent of total fund with a value of $26.7 billion.

GLOBAL PUBLIC EQUITY

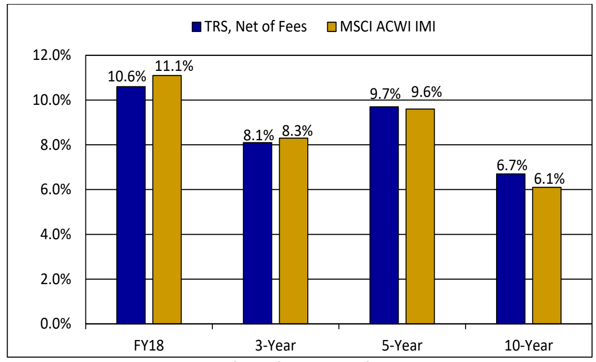
TRS invests in public equities, or common stock, representing shares or units of ownership in specific corporations offering the opportunity to participate in the success of the global economy. Stockholders share in the growth of a company through an increase in stock price, as well as through the distribution of corporate profits in the form of dividends. TRS's public equity managers are able to participate in the strength of individual markets by seeking out superior companies that are particularly strong in their own markets or industries, as not all economies move in tandem.

The global public equity market has continued to rally since the Global Financial Crisis ended in early 2009. Market volatility remains low relative to history. Both domestic and international markets contributed to solid global public equity performance for the year ended June 30, 2018.

As of June 30, 2018, the global public equity portfolio value represented $18.5 billion or 35.9 percent of the total fund. The long-term policy target for public equities is 34.0 percent of total fund. For the year ending June 30, 2018, the global public equity portfolio earned 10.6 percent on a net of fee basis, underperforming the Morgan Stanley Capital International ("MSCI") All Country World Investable Market Index by 0.5 percent.

One-, three-, five- and 10-year comparisons to these benchmarks are shown in the following charts.

Global Public Equity vs. Benchmark Return



Sources: State Street Bank and Trust and TRS

The top 10 holdings in global public equities, categorized by U.S. and international, as of June 30, 2018, are shown below. These 20 securities combine to represent 11.1 percent of the global public equity holdings. These stocks illustrate the sector and geographic diversification present in the portfolio.

Top 10 U.S. Equity Holdings at June 30, 2018

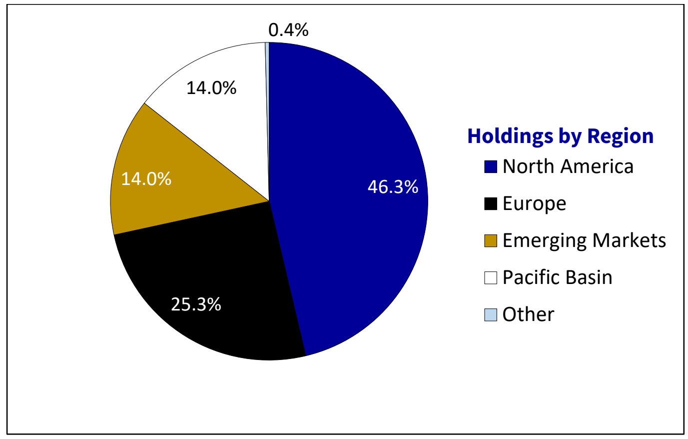
Firm	Sector	Fair Value (USD)
Apple, Inc.	Technology	$188,804,240
Amazon.com, Inc.	Consumer	170,816,302
Microsoft Corp.	Technology	169,354,096
Facebook, Inc.	Technology	117,960,207
Berkshire Hathaway, Inc.	Financials	109,952,342
Johnson & Johnson	Health Care	106,152,236
JP Morgan Chase & Co.	Financials	104,476,651
Pfizer, Inc.	Health Care	103,124,485
Citigroup, Inc.	Financials	91,347,808
Intel Corp.	Technology	90,342,656
Total		**$1,252,331,023**

Sources: State Street Bank and Trust and TRS

Top 10 International Equity Holdings at June 30, 2018

Firm	Country	Fair Value (USD)
Tencent Holdings LTD	China	$124,635,947
Alibaba Group Holding LTD	China	99,349,831
Samsung Electronics LTD	Korea	97,568,067
Royal Dutch Shell PLC	United Kingdom	84,998,029
Roche Holding AG	Switzerland	71,165,051
BP PLC	United Kingdom	62,091,847
Allianz SE	Germany	59,589,090
ADR Taiwan Semiconductor	Taiwan	54,409,140
Nestle SA	Switzerland	54,122,978
Sanofi	France	52,309,102
Total		**$760,239,082**

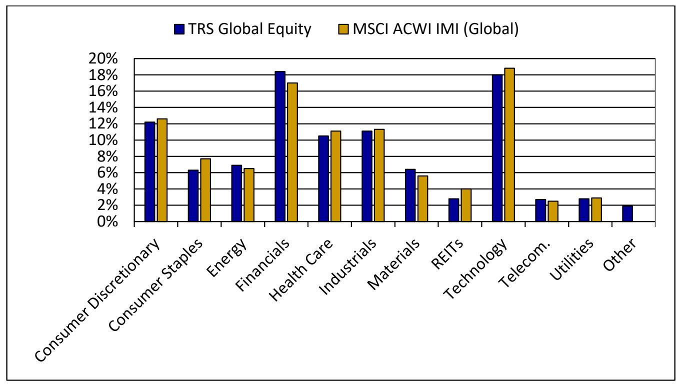
Sources: State Street Bank and Trust and TRS



Sources: BlackRock Aladdin and TRS

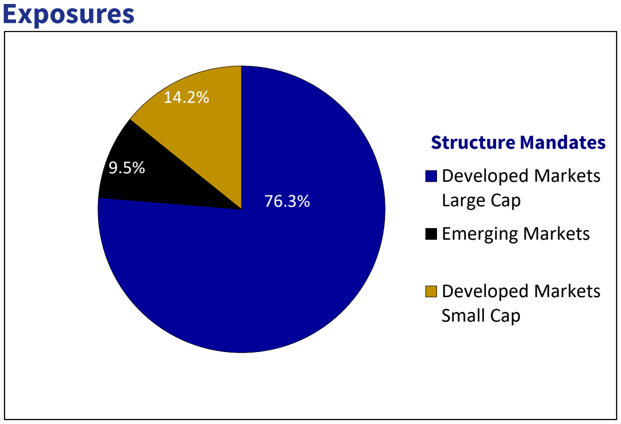
Investment managers are chosen to diversify the portfolio based on capitalization, geography and style basis. This diversification is important for controlling the risk of the portfolio, as well as balancing the portfolio. As of June 30, 2018, the following charts convey the sector and regional exposure, asset allocation mix and fundamental characteristics for the global public equity portfolio.

Diversification by Sector



Sources: BlackRock Aladdin and TRS

Global Public Equity Characteristics and Exposures



Source: TRS

Fundamental Characteristics	TRS Global Public Equity	MSCI ACWI IMI (Global)
Average market cap ($ billions)	$106.9	$123.9
Price/earnings ratio	14.7x	15.9x
Dividend yield	2.40%	2.26%
Price/book ratio	2.3x	2.5x

Sources: BlackRock Aladdin and TRS

TRS employed the following public equity managers as of June 30, 2018.

Global Public Equity Managers and Assets Under Management (inception date of account)

	Assets
Developed Markets Large Cap	
Acadian Asset Management, L.L.C. (07/16)	$980,481,501
Arrowstreet Capital, L.P. (11/17)	745,214,244
Brown Capital Management, L.L.C. (10/16)	60,901,719
J.P. Morgan Investment Management, Inc. (12/07)	1,164,954,381
Levin Capital Strategies, L.P. (10/10)	422,984,864
LSV Asset Management (9/14)	2,077,065,463
Mondrian Investment Partners Limited (4/93)	621,459,939
Northern Trust Investments, Inc. (8/10)	2,251,169,779
Robeco Boston Partners Asset Management, L.P. (3/10)	638,759,351
RhumbLine Advisors, L.P. (5/06)	3,852,858,124
Strategic Global Advisors (3/11)	544,197,034
T. Rowe Price Associates, Inc. (11/06)	734,445,684
Developed Markets Small Cap	
AQR Capital Management, L.L.C. (5/17)	234,012,286
Channing Capital Management, L.L.C. (12/11)	152,265,932
DFA Investment Dimensions Group, Inc. (6/11)	305,511,145
Dimensional Fund Advisors, L.P. (6/08)	438,924,911
Emerald Advisors, Inc. (11/04)	219,604,355
LSV Asset Management (12/02)	368,781,509
Matarin Capital Management (7/17)	33,872,026
RhumbLine Advisors, L.P. (5/07)	37,385,141
Strategic Global Advisors (12/13)	369,411,640
Wasatch Advisors (11/14)	470,036,491
Emerging Markets	
AQR Capital Management, L.L.C. (7/13)	709,190,116
Axiom International Investors (5/15)	538,755,374
J.P. Morgan Investment Management, Inc. (8/15)	448,992,289
Northern Trust Investments, Inc. (4/13)	61,021,443
Currency Overlay *	
Lee Overlay Partners Limited (7/16)	26,820,859

**Market value consists of unrealized gains and/or losses to be realized next settlement period.*
Note: The list does not include managers terminated prior to June 30, 2018 with residual assets in the account.

PRIVATE EQUITY

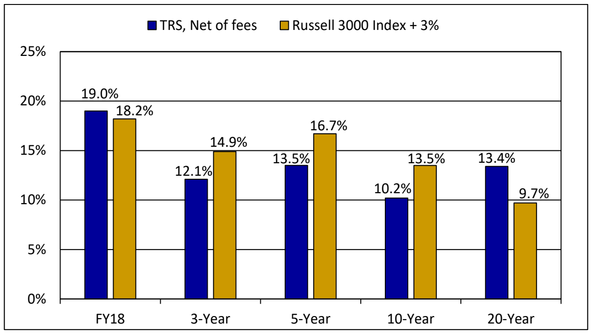
Private equity includes investments that are placed and traded outside of the stock exchanges and other public markets. Over the long term, they are an attractive investment for pension funds, endowments, insurance companies and other sophisticated investors. The investment class benefits the economy by providing needed capital to start-up companies and for continued growth in privately held companies and firms that are restructuring to better compete. Investing in private equity carries additional risk, but with skillful selection of managers, returns can be significantly higher than public equity investments.

The asset class is commonly referred to as private equity, even though it includes privately placed debt instruments as well. Often, the debt includes a control position that is similar to equity as it allows the debt holder to influence the operations and management of the company. TRS is widely diversified across all subsectors within private equity, including buyout, growth equity, venture capital and distressed debt.

TRS measures private equity performance against the Russell 3000 Index plus 300 basis points (3 percentage points). This benchmark does not specifically compare performance to the private equity industry, but rather to the TRS long-term expectation that private equity produce returns superior to the public markets. For the one-year period ended June 30, 2018, private equity earned 19.0 percent on a net of fee basis, compared to the benchmark gain of 18.2 percent. TRS's investments in private equity maintain very strong long-term returns. The long-term performance strength of the private equity program and the asset class's diversification both benefit the overall portfolio.

One-, three-, five-, ten- and 20-year comparisons relative to the benchmark follow.

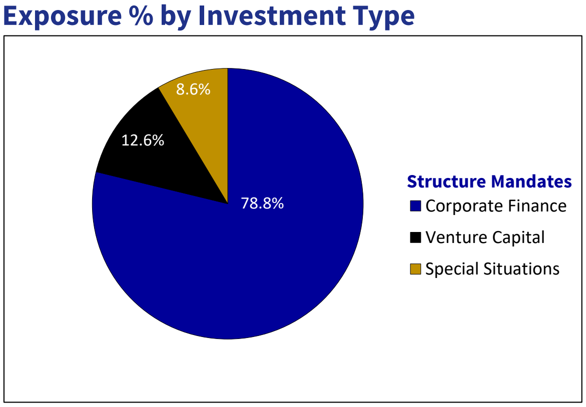
Private Equity vs. Benchmark Return



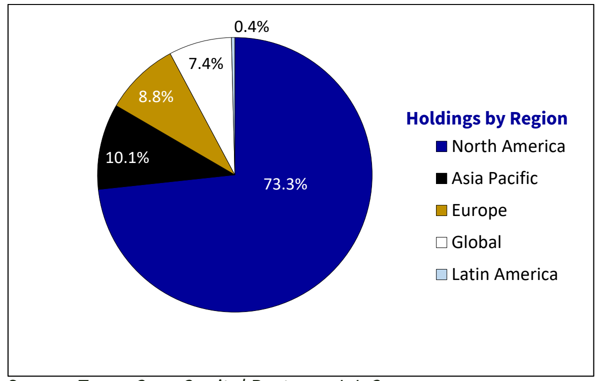
Sources: State Street Bank and Trust and TRS

In July 2017, the TRS Board of Trustees adopted a new asset allocation study that increased the private equity long-term allocation target to 15 percent. Successful implementation of this target is subject to many factors, including public market performance and sufficient availability of high quality private equity opportunities. TRS continues to prudently increase its exposure to private equity and as of June 30, 2018, $6.8 billion or 13.2 percent of the TRS investment portfolio was assigned to the private equity asset class. The following charts provide exposure percentage by type and geography at June 30, 2018.

Exposure % by Investment Type

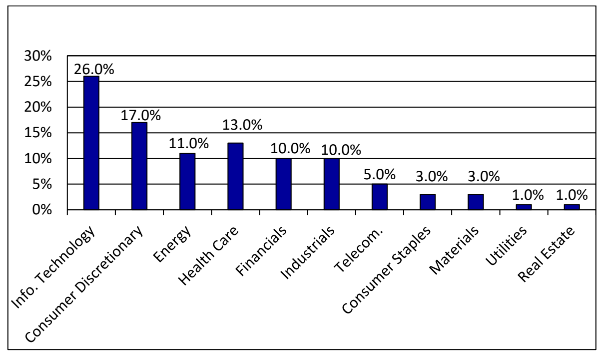


Source: TorreyCove Capital Partners, L.L.C.



Source: TorreyCove Capital Partners, L.L.C.

Sector Positioning of Private Equity Holdings



Source: TorreyCove Capital Partners, L.L.C

The following table lists the private equity partnerships/funds and the respective assets under management that TRS has investments with as of June 30, 2018.

Private Equity Partnerships and Assets Under Management (inception date of account)

	Assets
Corporate Finance	
Advent International GPE VI Limited Partnership (7/08)	$32,444,732
Advent International GPE VII-C Limited Partnership (12/12)	106,007,491
Advent International GPE VIII-B-2 Limited Partnership (9/16)	59,547,091
Altaris Constellation Partners IV, L.P. (6/18)	4,600,967
Altaris Health Partners IV, L.P. (6/18)	12,405,169
Apollo Investment Fund V, L.P. (5/01)	2,514,082
Apollo Investment Fund VI, L.P. (5/06)	31,837,121
Apollo Investment Fund VII Annex A (5/12)	5,551,826
Apollo Investment Fund VII, L.P. (1/08)	71,321,860
Apollo Investment Fund VIII Annex A (4/16)	35,893,437

(continued)

(continued)

	Assets
Apollo Investment Fund VIII, L.P. (12/13)	$224,081,945
Astorg VI, SLP (7/16)	31,512,636
Blackstone Capital Partners VI Annex A (10/11)	26,381,542
Blackstone Capital Partners VI, L.P. (1/11)	79,158,373
Carlyle Japan International Partners III Annex A (10/14)	30,972,924
Carlyle Japan International Partners III, L.P. (3/15)	21,579,309
Carlyle Partners IV, L.P. (4/05)	2,820,563
Carlyle Partners V, L.P. (7/07)	19,301,175
Carlyle Partners VI Annex A (12/15)	17,343,162
Carlyle Partners VI, L.P. (7/13)	241,433,102
Carlyle/Riverstone Global Energy and Power Fund II, L.P. (1/03)	92,363
Carlyle/Riverstone Global Energy and Power Fund III, L.P. (4/06)	7,011,908
Clearlake Capital Partners IV Annex A (1/17)	29,522,747
Edgewater Growth Capital Partners II, L.P. (2/06)	6,621,247
Edgewater Growth Capital Partners III, L.P. (9/11)	40,913,276
Edgewater Growth Capital Partners, L.P. (11/03)	1,935,334
EIF United States Power Fund IV, L.P. (11/11)	69,116,373
Energy Capital Partners I, L.P. (4/06)	3,662,071
Energy Capital Partners II Annex A (10/11)	18,687,235
EQT VI, L.P. (9/11)	81,576,912
EQT VII, L.P. (1/16)	86,934,715
EQT Mid Market Europe, L.P. (8/17)	21,670,496
Evercore Capital Partners II, L.P. (distributed securities) (4/03)	48,658
Gamma, L.P. (9/00)	127,170
GI Partners Fund IV, L.P. (1/14)	89,058,000
Grain Communications Opportunity Fund, L.P. (7/16)	43,698,230
Great Point Partners II, L.P. (11/13)	34,346,857
Green Equity Investors V, L.P. (8/07)	35,370,357
Green Equity Investors VI, Annex A (6/14)	41,691,586
Green Equity Investors VI, L.P. (11/12)	209,551,299
GTCR Fund VIII, L.P. (7/03)	4,056,689
ICV Partners II, L.P. (1/06)	2,795,780
ICV Partners III, L.P. (10/13)	21,472,488
ICV Partners IV, L.P. (5/18)	4,340,769
IL Asia Investors, L.P. (12/14)	114,464,513
Inflexion Buyout Fund V (No. 1), L.P. (6/18)	320,101
Inflexion Partnership Capital Fund II (No. 1), L.P. (6/18)	4,159
J.C. Flowers II, L.P. (2/07)	10,076,110
Littlejohn Fund IV, L.P. (7/10)	35,786,778

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	Assets
Madison Dearborn Capital Partners V, L.P. (7/06)	$308,045
Madison Dearborn Capital Partners VII, L.P. (1/16)	31,827,914
Marlin Equity V, L.P. (2/18)	14,281,972
MBK Partners Fund II, L.P. (5/09)	5,023,683
MBK Partners Fund III Annex A (12/13)	30,783,006
MBK Partners Fund III Annex B (10/15)	36,242,996
MBK Partners Fund III, L.P. (4/13)	166,624,955
MBK Partners Fund IV, L.P. (3/17)	39,371,811
Morgan Creek Partners Asia, L.P. (1/11)	96,334,180
New Mountain Partners III, L.P. (8/07)	64,969,283
New Mountain Partners IV, L.P. (12/14)	94,161,421
New Mountain Partners V, L.P. (11/17)	25,146,887
NGP Natural Resources IX Annex A (5/12)	244,095
NGP Natural Resources X, L.P. (5/12)	52,407,879
NGP Natural Resources XI, L.P. (11/14)	103,811,634
NGP Natural Resources XII, L.P. (11/17)	20,992,270
Palladium Equity Partners IV, L.P. (3/14)	10,670,054
Parthenon Investors IV Annex A (6/15)	108,275,655
Parthenon Investors IV, L.P. (4/12)	42,587,430
Parthenon Investors V, L.P. (1/17)	30,611,941
Pine Brook Capital Partners, L.P. (1/08)	10,778,622
Providence Equity Partners VI Annex A (8/12)	41,307,349
Providence Equity Partners VI, L.P. (3/07)	42,729,417
Providence Equity Partners VII Annex A (7/16)	61,933,570
Providence Equity Partners VII, L.P. (6/12)	220,098,111
RCP SBO Fund, L.P. (10/16)	23,776,864
Rhone Partners IV L.P. (1/12)	34,168,230
Rhone Partners V, L.P. (7/15)	46,226,623
Riverstone Global Energy and Power Fund V Annex A (11/13)	2,062,347
Riverstone Global Energy and Power Fund V, L.P. (6/12)	190,589,821
Riverstone Global Energy and Power Fund VI, L.P. (9/16)	107,332,905
Riverstone/Carlyle Global Energy and Power Fund IV, L.P. (3/08)	47,219,822
RRJ Capital Master Fund III, L.P. (12/15)	58,605,881
Silver Lake Partners III, L.P. (8/07)	58,252,733
Silver Lake Partners IV, L.P. (10/13)	201,228,974
Silver Lake Partners V, L.P. (6/18)	12,100,769
Siris Partners II, L.P. (1/12)	35,960,909
Siris Partners III Annex A (12/15)	14,556,995
Siris Partners III, L.P. (5/15)	86,811,321
TA XII-A, L.P. (2/16)	38,825,601

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	Assets
The Baring Asia Private Equity Fund V, L.P. (4/11)	$87,476,119
The Baring Asia Private Equity Fund VI, L.P.1 (9/15)	62,418,806
Trident V Annex A (10/11)	29,049,835
Trident V, L.P. (12/10)	66,541,885
Trident VI Annex A (8/15)	34,650,961
Trident VI, L.P. (9/14)	104,785,853
Trident VII, L.P. (12/17)	32,001,656
Trustbridge Partners IV, L.P. (12/11)	60,549,412
Veritas Capital Fund IV, L.P. (11/10)	63,219,915
Veritas Capital Fund V, L.P. (6/15)	151,838,652
Veritas Capital Fund VI, L.P. (6/17)	10,873,540
Vicente Capital Partners Growth Equity Fund, L.P. (4/08)	13,139,702
Vista Equity Partners Fund III, L.P. (11/07)	13,963,412
Vista Equity Partners Fund IV, L.P. (10/11)	41,047,510
Vista Equity Partners Fund V, L.P. (5/14)	301,738,555
Vista Equity Partners Fund VI, L.P. (6/16)	122,066,119
Vista Foundation Fund III, L.P. (7/16)	21,297,672
VSS Communications Partners IV, L.P. (3/05)	84,722
Warburg Pincus Private Equity X, L.P. (10/07)	22,330,650
Special Situations	
Apollo Lincoln Private Credit Fund, L.P. (10/14)	52,974,092
Clearlake Capital Partners II, L.P. (7/09)	13,381,384
Clearlake Capital Partners III, L.P. (10/12)	84,607,024
Clearlake Capital Partners IV, L.P. (9/15)	77,710,330
Clearlake Capital Partners V, L.P. (2/18)	17,111,097
Clearlake Opportunities Partners (P), L.P. (9/15)	22,250,242
Harvest Partners Structured Capital Fund II, L.P. (6/18)	10,290,480
Maranon Mezzanine Fund, L.P. (8/09)	1,616,781
Oaktree European Principal Fund III, L.P. (11/11)	50,883,933
Oaktree Opportunities Fund IX, L.P. (3/13)	80,123,797
Oaktree Opportunities Fund VIII, L.P. (3/10)	11,309,609
OCM European Principal Opportunities Fund II, L.P. (8/08)	4,121,554
OCM Opportunities Fund V, L.P. (6/04)	352,977
OCM Opportunities Fund VIIb, L.P. (6/08)	6,243,185
OCM Opportunities Fd Xb, L.P. (6/18)	2,488,142
Prism Mezzanine Fund, L.P. (12/04)	4,079,892
Venture Capital	
Battery Ventures XI-A Side Fund, L.P. (6/16)	4,019,878
Battery Ventures XI-A, L.P. (6/16)	7,179,587
Carlyle U.S. Growth Fund III, L.P. (6/07)	958,561
Granite Ventures II, L.P. (5/05)	21,794,932

(continued)

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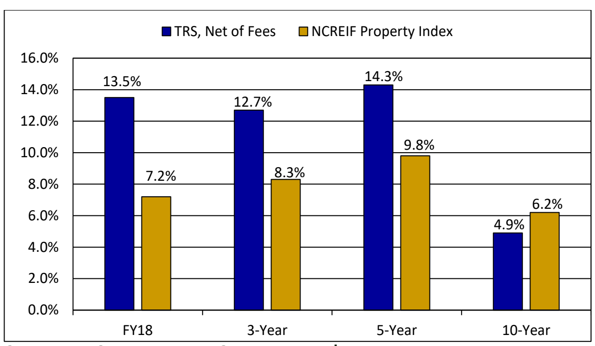
	Assets
Greenspring IL Master, L.P. (1/18)	$10,872,794
Greenspring IL Special, L.P. (6/18)	1,400,000
HealthpointCapital Partners, L.P. (6/04)	3,830,745
Hopewell Ventures, L.P. (6/04)	3,407,115
Illinois Emerging Technologies Fund, L.P. (6/04)	177,908
Institutional Venture Partners XV, L.P. (6/15)	34,609,193
Institutional Venture Partners XVI, L.P. (2/18)	2,849,693
JMI Equity Fund VII, L.P. (2/11)	20,516,602
JMI Equity Fund VIII-A, L.P. (10/15)	20,352,585
Lightspeed Venture Partners IX, L.P. (3/12)	37,166,264
Lightspeed Venture Partners Select II, L.P. (6/16)	13,320,832
Lightspeed Venture Partners Select, L.P. (3/14)	14,725,046
Lightspeed Venture Partners X, L.P. (7/14)	13,311,041
Lightspeed Venture Partners XI, L.P. (3/16)	8,570,450
LiveOak Venture Partners I, L.P. (2/13)	18,459,329
Longitude Venture Partners II, L.P. (4/13)	47,026,719
Longitude Venture Partners III, L.P. (12/16)	10,245,431
Longitude Venture Partners, L.P. (3/08)	2,424,860
Morgan Creek Partners Venture Access Fund, L.P. (1/12)	117,455,076
New Enterprise Associates 15, L.P. (3/15)	38,502,096
New Enterprise Associates 16, L.P. (5/17)	12,964,600
Scale Venture Partners V, L.P. (1/16)	28,496,925
SCP Private Equity Partners, L.P. (5/97)	24,876
Shasta Ventures, L.P. (1/05)	3,484,297
Sofinnova Venture Partners VIII, L.P. (8/11)	23,532,698
Sofinnova Venture Partners IX, L.P. (12/14)	47,228,814
Sofinnova Venture Partners X, L.P. (11/17)	8,082,421
StarVest Partners II, L.P. (1/09)	9,119,514
Sunstone Partners I, L.P. (2/16)	7,765,533
Union Grove Partners Direct Venture Fund, L.P. (4/14)	13,285,184
Union Grove Partners Venture Access Fund II, L.P. (3/16)	9,870,320
Union Grove Partners Venture Access Fund II-B, L.P. (12/15)	39,475,040
Union Grove Partners Venture Access Fund, L.P. (3/14)	67,012,179
VantagePoint Venture Partners IV, L.P. (6/00)	5,601,210

OPPORTUNISTIC REAL ESTATE

Due to the risk profile inherent within opportunistic real estate investments, these assets are included in the equity asset class for reporting purposes. The TRS portfolio maintains a long-term target allocation of 5.0 percent to opportunistic strategies.

As of June 30, 2018, TRS held $1.4 billion in opportunistic real estate assets, or 2.8 percent of the total fund portfolio. For the fiscal year, this sub component of TRS's real estate portfolio earned 13.5 percent, net of fees, outpacing the National Council of Real Estate Investment Fiduciaries ("NCREIF") Index by 630 basis points. Opportunistic real estate performance and benchmark comparisons are noted in the following chart; sector and geographical exposures are presented with the real estate portfolio as a whole within the real assets narrative.

Opportunistic Real Estate vs. Benchmark Return



Source: Stepstone Group Real Estate, L.P.

Performance of the opportunistic real estate funds has been strong as shown in the chart above. The opportunistic funds outperformed relative to NCREIF by 630 bps for one-year, 440 bps for three-year and 450 bps for five-year, while under-performing NCREIF by 130 bps for 10 years. The near-term strength of the real estate market coupled with accretive value enhancement strategies employed within the opportunistic real estate portfolio has been favorable thus driving positive returns.

The following table lists the opportunistic real estate partnerships/funds (and the respective assets under management) that TRS has investments with as of June 30, 2018.

Opportunistic Real Estate Partnerships and Assets Under Management (inception date of account)

	Assets
Opportunistic Real Estate	
Closed-end Accounts	
Beacon Capital Strategic Partners V, L.P. (8/07)	$94,683
Blackstone Real Estate Partners VI, L.P. (9/07)	6,267,632
Blackstone Real Estate Partners VII, L.P. (1/12)	162,117,739
Blackstone Real Estate Partners VIII.TE.2, L.P. (8/15)	182,255,470
Capri Select Income Fund II, L.L.C. (12/05)	44,478
Carlyle Realty Partners IV, L.P. (6/05)	46,316,235
Carlyle Realty Partners VII, L.P. (7/14)	70,608,102
Cornerstone Hotel Income & Equity Fund II, L.P. (7/08)	69,490
Dyal Capital III Annex A (5/17)	43,934,950
IC Hospitality Fund II, L.P. (4/15)	6,956,667
Lone Star Real Estate Fund III (U.S.), L.P. (5/14)	15,466,632
Lone Star Real Estate Fund IV (U.S.), L.P. (10/15)	158,566,970
Lone Star Real Estate Fund V (U.S.), L.P. (9/17)	25,847,226
Rockpoint Real Estate Fund V, L.P. (8/15)	60,764,465
Southwest Multifamily Partners, L.P. (8/12)	19,762,336
Starwood Distressed Opportunity Fund IX Global, L.P. (3/13)	78,332,416
Starwood IX Annex A (11/13)	25,702,254
Starwood Opportunity Fund X Global, L.P. (10/15)	158,792,441
Starwood X Annex A (1/15)	7,140,279
Starwood X Annex B (7/15)	10,681,195
Walton Street Real Estate Fund IV, L.P. (7/03)	1,466,776
Walton Street Real Estate Fund VI, L.P. (4/09)	41,077,034
Walton Street Real Estate Fund VII, L.P. (6/13)	57,325,155
International Accounts	
BlackRock Asia Property Fund III, L.P. (12/07)	566,547
Blackstone Real Estate Partners Asia, L.P. (12/13)	79,785,575
Blackstone Real Estate Partners Asia II, L.P. (6/18)	3,087,176
Carlyle Europe Real Estate Partners III, L.P. (9/07)	4,924,666
CB Richard Ellis Strategic Partners Europe Fund III, L.P. (4/07)	1,001,998
Fortress Japan Opportunity Fund III (Dollar A), L.P. (8/15)	86,524,226
Gateway Real Estate Fund IV, L.P. (7/13)	36,590,672
LaSalle Asia Opportunity Fund III, L.P. (11/07)	1,278,964
LaSalle Asia Opportunity Fund IV, L.P. (7/13)	34,528,791
Niam Nordic V, L.P. (4/12)	17,639,453

GLOBAL INCOME

The global income asset class is comprised of investments in the financial obligations of entities, including, but not limited to, U.S. and foreign corporations, governments, agencies or municipalities and short-term investments. These investments may be publicly-traded instruments or private debt or credit investments. The majority of global income assets promise to pay a specified sum of money at a future date, while paying specified interest during the term of the issue. Income generative assets and other debt-related investments can reduce volatility, offer low or negative correlation to other asset classes and provide income streams, or coupons, essential to the growth of the overall portfolio.

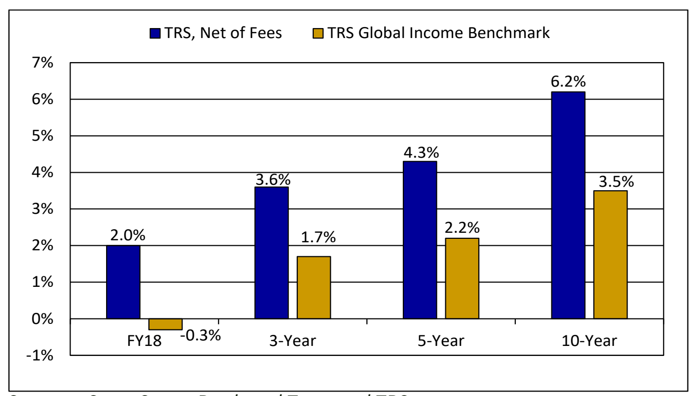
The U.S. Federal Reserve continued to modestly raise interest rates during FY18, while unwinding its balance sheet, contributing to a flattening yield curve. A shift in tone from other major global central banks spurred most developed market yields to rise even as longer-term rates actually fell. Geopolitics, including elections and political controversy in several countries, dominated headlines and contributed to brief periods of market volatility. However, the fundamental economic backdrop remained largely in place.

The asset class blended benchmark consists of global fixed income and private debt strategies measured against the Bloomberg Barclays Aggregate Index, along with short-term investments against the Bank of America Merrill Lynch 91-Day Treasury Bill Index. For the fiscal year ended June 30, 2018, the $11.9 billion global income portfolio represented 23.0 percent of the total fund. Traditional fixed income investments and private debt strategies comprise the majority of investments, representing 90 percent of the asset class, while TRS custom cash portfolio completes the remainder of the asset class. The long-term policy target for global income is 17.0 percent of total fund; however, current levels remain closer to the interim target of 21.0 percent.

TRS's global income portfolio outperformed the asset class blended index and other primarily public related debt indices during the fiscal year. TRS continues increasing exposures to private debt opportunities and maintains a bias away from U.S. and global fixed income indices as benchmark investments tend to reward governments and corporations with the highest debt levels, higher in the capital debt structure. TRS also increased exposure to floating rate instruments and maintained lower duration in anticipation of higher interest rates and U.S. central bank balance sheet unwinding. Further, the System has worked to create structural flexibility within the portfolio, opportunistically addressing areas of potential market dislocation.

For the year ended June 30, 2018, the global income asset class earned 2.0 percent on a net of fee basis compared to asset class blended benchmark loss of 0.3 percent. One-, three-, five- and 10-year comparisons to this benchmark are shown in the following chart.

Global Income vs. Benchmark Return



Sources: State Street Bank and Trust and TRS

The following table lists the top 10 global income investments or funds held by TRS as of June 30, 2018, exclusive of the TRS custom cash portfolio.

Top 10 Global Income Holdings at June 30, 2018

Security/Position	Fair Value (USD)
PGIM Fixed Income Global Liquidity Relative Value Fund I (Cayman), Ltd.	$571,162,944
Franklin Templeton Emerging Market Debt Opportunities (Cayman) Fund, Ltd.	553,301,213
PIMCO Horseshoe Fund, L.P.	426,785,601
PIMCO Asset-Backed Securities Portfolio	242,722,575
NXT Capital Senior Loan Fund IV, L.P.	122,914,113
Apollo Lincoln Fixed Income Fund, L.P.	110,060,949
PIMCO BRAVO Fund Onshore Feeder II, L.P.	107,879,023
PIMCO Distressed Senior Credit Opportunities Fund II, L.P.	104,126,949
Oaktree Enhanced Income Fund III, L.P.	102,529,352
U.S. Treasury Note	96,270,302
Total	$2,437,753,021

Sources: State Street Bank and Trust and TRS

The following table lists the top 10 largest debt securities holdings, excluding commingled funds, held within the TRS plan portfolio as of June 30, 2018. A complete listing of investment holdings is available as a separate report.

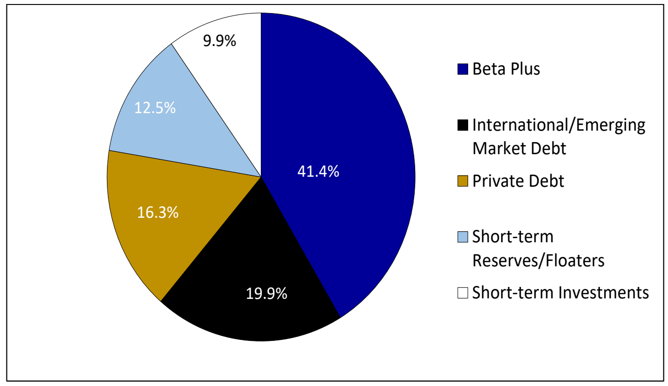
Largest Debt Securities Holdings at June 30, 2018

Security/Position	Maturity Date	Interest Rate	Fair Value (USD)
Federal National Mortgage Assoc.	8/13/48	3.50%	$213,123,462
U.S. Treasury Note	8/15/27	2.25	96,270,302
Federal National Mortgage Assoc.	7/12/48	3.50	95,886,817
U.S. Treasury Inflation Linked Note	4/15/19	.13	86,229,828
U.S. Treasury Note	11/30/22	2.00	79,662,488
U.S. Treasury Inflation Linked Note	4/15/20	.13	68,936,460
U.K. Treasury Inflation Linked Note	3/22/26	.13	67,230,672
U.S. Treasury Note	5/31/22	1.75	58,573,129
Federal National Mortgage Assoc.	8/13/48	4.00	56,196,718
U.S. Treasury Inflation Linked Note	1/15/25	.25	55,605,434
Total			$877,715,310

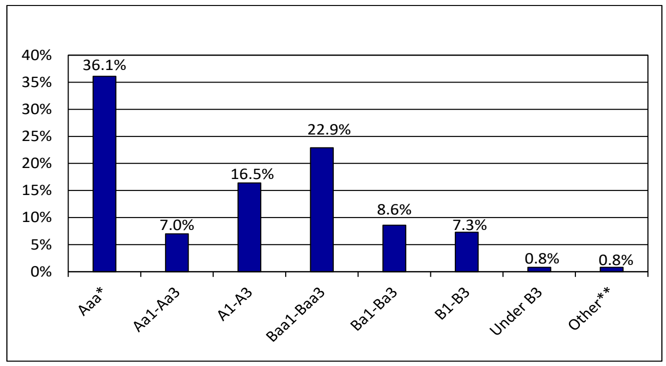
Sources: State Street Bank and Trust and TRS

The following charts provide the asset allocation mix and statistical information on TRS's global income portfolio as of June 30, 2018.

Global Income Allocation



Diversification by Quality Rating for Individual Bonds



Sources: State Street Bank and Trust and TRS
** U.S. Treasury Securities are included*
*** Other includes unrated Securities*
Note: Fixed income commingled funds not included.

Global Income Fundamental Characteristics

	TRS Global Income Portfolio	Bloomberg Barclays Capital Aggregate Index
Average maturity	5.9 years	8.4 years
Effective duration	3.4 years	5.9 years
Average quality rating	A3	Aa2

Sources: State Street Bank and Trust and TRS

TRS employed the following global income managers as of June 30, 2018. This excludes fixed income-type assets overseen by managers in other asset classes containing income or other debt securities/funds as a small part of their overall strategies.

Global Fixed Income Managers and Assets Under Management (inception date of account)

	Assets
AG Direct Lending Fund II, L.P. (12/16)	$79,171,547
Apollo Lincoln Fixed Income Fund, L.P. (3/14)	174,652,840
BIG Real Estate Fund I, L.P. (11/17)	15,222,501
Dolan McEniry Capital Management, L.L.C. (5/06)	725,569,725
DoubleLine Mortgage Opportunities L.P. (9/17)	80,966,397
Franklin Advisers, Inc. (2/08)	1,017,737,003
Franklin Templeton Emerging Market Debt Opportunities (Cayman) Fund, Ltd. (12/10)	553,301,213
Garcia Hamilton & Associates, L.P. (6/10)	363,294,715
Global Transport Income Fund Master Partnership SCSp (11/17)	51,879,777
LCM Partners CO IIIa, L.P. (9/16)	55,252,312
MacKay Shields L.L.C. (8/11)	1,095,275,255
Maranon Senior Credit Fund II-B, L.P. (6/13)*	36,623,912
Monroe Capital Private Credit Fund II, L.P. (4/16)	43,262,010
Northern Shipping Fund III, L.P. (1/16)	42,677,456
NXT Capital Senior Loan Fund II, L.P. (8/13)*	26,684,007
NXT Capital Senior Loan Fund IV, L.P. (1/16)	112,914,113
NXT Capital Senior Loan Fund V, L.P. (10/17)	29,167,643
Oaktree Enhanced Income Fund II, L.P. (5/14)	93,509,202
Oaktree Enhanced Income Fund III, L.P. (4/16)	102,529,352
Oaktree Real Estate Debt Fund, L.P. (10/13)	39,317,395
Oaktree Real Estate Debt Fund II, L.P. (3/17)	8,006,953
Pacific Investment Management Company, L.L.C. (7/82)	1,274,614,527
PIMCO BRAVO Fund III Onshore Feeder, L.P. (12/16)	28,487,964
PIMCO BRAVO Fund Onshore Feeder I, L.P. (11/10)*	3,217,530
PIMCO BRAVO Fund Onshore Feeder II, L.P. (3/13)	107,879,023
PIMCO Corporate Opportunities Fund II, L.P. (1/16)	39,336,154
PIMCO Distressed Senior Credit Opportunities Fund II, L.P. (12/17)	104,126,949
PIMCO Horseshoe Fund, L.P. (12/14)	426,785,601
Pemberton Debt Fund Delaware I, L.P. (11/16)	45,456,426
PGIM, Inc. (12/08)	836,838,477
PGIM Fixed Income Global Liquidity Relative Value Fund I (Cayman), Ltd. (12/15)	571,162,944
Ramirez Asset Management, Inc. (3/17)	52,103,699
Riverstone Credit Partners, L.P. (12/15)	39,334,340
Riverstone Credit Partners II, L.P. (5/18)	22,403,036
SCP Illinois L.L.C. (1/18)	41,996,300
Taplin, Canida & Habacht (4/13)	1,482,690,246
Taurus Mining Finance Annex Fund L.L.C. (1/17)	10,292,458
Taurus Mining Finance Fund L.L.C. (4/15)	34,490,658
TCW Asset Management Company (8/13)	786,489,189
Vista Credit Opportunities Fund I-B, L.P. (10/14)	26,712,330

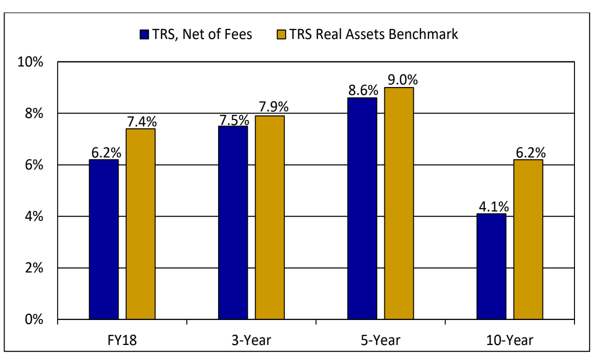
** Accounts currently in liquidation or being discontinued*
Note: The list does not include managers terminated prior to June 30, 2018 with residual assets in the account.

REAL ASSETS

For the fiscal year ended June 30, 2018, the $7.0 billion real assets portfolio represented 13.7 percent of the total fund. Real estate core and value-add strategies comprise the majority of investments, representing 82 percent of the asset class, while global inflation-linked securities and other real assets including infrastructure, agriculture and direct energy complete the remainder of the asset class. Given TRS has moved to a risk-based asset class structure, opportunistic real estate investments are grouped within equity exposure; whereas, core and value-add real estate investments are classified as real assets.

The asset class blended benchmark consists of real estate strategies measured against the NCREIF Property Index, along with global inflation-linked securities and other real assets benchmarked against the Consumer Price Index (CPI) + 5.0 percent. The long-term policy target for real assets is 15.0 percent of total fund, comprised of 11.0 percent allocated to core and value-add real estate and 4.0 percent allocated to other real assets. For the fiscal year, TRS's real assets portfolio generated 6.2 percent, net of fees, compared to the 7.4 percent return of the benchmark. Real assets performance and benchmark comparisons are noted in the following chart.

Real Assets vs. Benchmark Return



Sources: State Street Bank and Trust and TRS

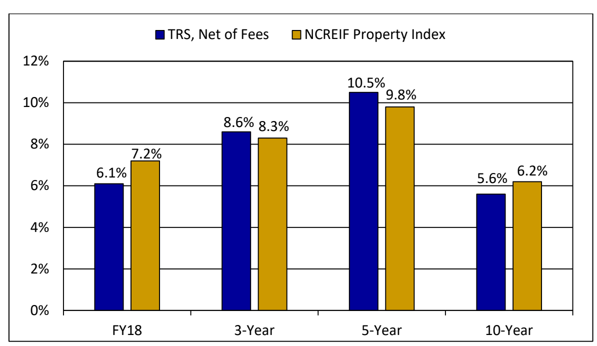
The real asset class offers competitive returns, provides diversification benefits to portfolios of stocks and bonds, and serves as a hedge against inflation. Investments in real assets are intended to increase the TRS total portfolio long-term rate of return and reduce year-to-year volatility. Additionally, real assets offers a strong income component to pay TRS benefits.

Real estate investments currently represent a significant portion of the asset class and are defined as direct investments or ownership in land and buildings including apartments, offices, warehouses, shopping centers and hotels. Further, TRS holds partnership interests in entities that purchase and manage property and pass rent and sale income back to TRS.

Real estate returns moderated to normalized/ sustainable levels in FY18. Overall, real estate market fundamentals remain strong, which supports continued favorable income returns; however, appreciation returns have diminished to more typical levels. TRS's real estate managers have been active in the market throughout the year, upgrading the portfolios by identifying investments that provide downside protection in the event of a market correction.

The TRS portfolio maintains a long-term target allocation of 11.0 percent to core and value-add real estate. As of June 30, 2018, TRS held $5.8 billion in such assets or 11 percent of the total fund portfolio. For the fiscal year, TRS's core and value-add real estate portfolio earned 6.1 percent, net of fees, compared to the benchmark of 7.2 percent. Real estate performance and benchmark comparisons are noted in the following chart.

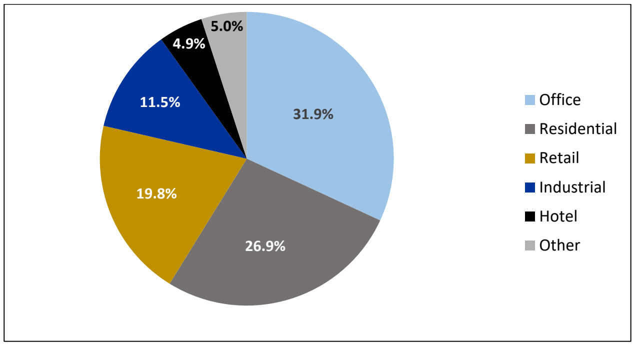
Core and Value-add Real Estate vs. Benchmark Return



Sources: State Street Bank and Trust and TRS

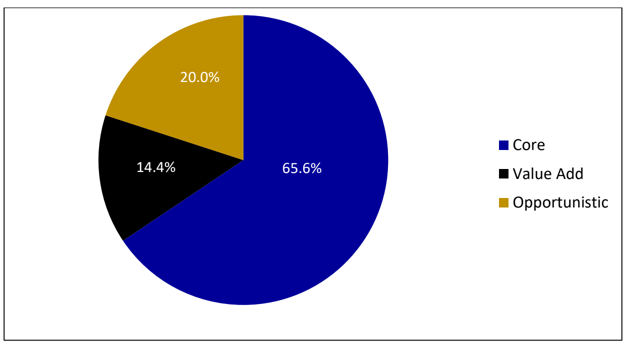
To enhance returns and reduce risk, TRS acquires high quality properties diversified geographically and by property type. In an effort to accurately capture sector and geographical exposures, the following charts are inclusive of opportunistic real estate investments (detailed further in the equity discussion). The data sets below exhibit TRS's real estate holdings by type, geography and risk return profiles as of June 30, 2018.

Real Estate Holdings by Type



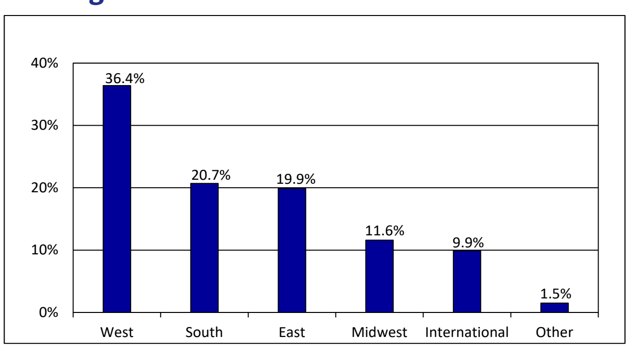
Source: StepStone Group Real Estate L.P.

Real Estate Holdings by Risk/Return



Source: StepStone Group Real Estate L.P.

Geographic Diversification of Real Estate Holdings



Source: StepStone Group Real Estate L.P.

Professional real estate advisors manage real estate owned by TRS. Separate account managers administer TRS's direct investments in real estate assets; closed-end and open-end accounts represent partnership interests in real estate funds including TRS's international real estate accounts.

As of June 30, 2018, TRS employed the following managers and/or funds investing in core real estate, value-add real estate, global inflation-linked strategies and other real assets including their respective assets under management.

Real Asset Managers & Assets Under Management (inception date of account)

	Assets
Real Estate (Core and Value Add)	
Separate Accounts	
Barings, L.L.C. (7/08)	$419,399,529
Barings, II (7/09)	9,869,233
Barings, III (8/09)	42,595
Capri/Capital Advisors, L.L.C. (12/91)	1,066,002,841
Heitman Capital Management, L.L.C. (7/09)	1,614,044,147
Invesco Institutional (N.A.), Inc. (7/08)	733,014,525
LPC Realty Advisors I, Ltd. (7/92)	994,037,227
Principal Real Estate Investors, L.L.C. (10/13)	184,567,168
Closed-End Accounts	
Exeter Value Fund IV, L.P. (9/17)	12,880,340
Oak Street Real Estate Capital Fund III, L.P. (5/16)	12,060,215
Oak Street Real Estate Capital Fund IV, L.P. (11/17)	18,340,334
Starwood Value Add Fund, L.P. (6/17)	191,764,640
Westbrook Real Estate Fund X, L.P. (7/16)	37,855,908
Open-End Accounts	
Hines U.S. Core Office Fund, L.P. (12/05)	610,106
Lion Industrial Trust (4/05)	406,785,577
International Real Estate Accounts	
Madison International Real Estate Liquidity Fund VI (TE), L.P. (3/16)	88,767,969
Global Inflation-linked Bonds	
Pacific Investment Management Company, L.L.C. (5/07)	789,632,295
Other Real Assets	
AQR Real Return Offshore Fund, L.P. (6/12)	331,221,302
Black River Agriculture Fund 2, L.P. (6/13)	65,548,906
Sheridan Production Partners III-B, L.P. (11/14)	28,206,000
West Street Global Infrastructure Partners III, L.P. (1/16)	39,075,000

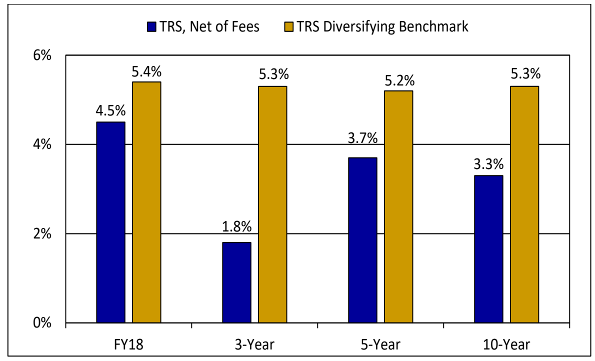
DIVERSIFYING STRATEGIES

Diversifying strategies includes mandates designed to provide attractive return and risk attributes while exhibiting low correlation to traditional public equity and fixed income investments. This segment of the portfolio continues to evolve and currently includes systematic macro, discretionary macro, opportunistic alpha, risk parity and alternative risk premia strategies. TRS has been investing in diversifying strategies profiles since FY07, making strategic adjustments over time to enhance the overall risk-return characteristics of the portfolio. Investments in diversifying strategies are administered via both direct investment manager relationships and diversified fund of funds.

The asset class benchmark consists of the relatively risk-free index of 90-Day Treasury Bills + 4.0 percent. While this is not an investible index, the benchmark represents the intended risk reduction characteristic of the asset class. Structurally, TRS continues to migrate away from fund of funds investments in order to lower the program's total expense ratio while increasing return expectations. Consistent with objectives, the asset class provides beneficial diversification for the total plan, while producing relatively stable returns.

The long-term policy target for diversifying strategies is 14.0 percent of total fund. As of June 30, 2018, the TRS diversifying strategies asset class value was $5.9 billion or 11.4 percent of total fund. For the fiscal year, TRS's diversifying strategies portfolio generated 4.5 percent, net of fees, compared to the 5.4 percent return of the benchmark. Diversifying strategies performance and benchmark comparisons are noted in the following chart.

Diversifying Strategies vs. Benchmark Return



Sources: State Street Bank and Trust and TRS

As of June 30, 2018, TRS employed the following managers and/or funds including their respective assets under management.

Diversifying Strategies Managers and Assets Under Management (inception date of account)

	Assets
Diversified Fund of Funds	
Bluegill Liquidating Fund, L.L.C. (6/07)	$37,780,209
Grosvenor Monarch Fund, L.L.C. (6/07)	326,427,031
Direct Investment Funds	
1818 I, L.P. (3/16)	94,234,758
All Weather Portfolio Limited (7/07)	523,648,033
Alphadyne Global Rates Fund II, Ltd. (6/14)	395,377,495
AQR Multi-Strategy Fund XIV, L.P. (7/07)	1,021,048,286
Brevan Howard Systematic Trading Fund, L.P. (6/15)	158,996,956
Bridgewater Optimal Portfolio, L.L.C. (4/16)	445,852,856
CCP Core Macro Fund, L.P. (3/18)	194,166,108
Crabel Fund, L.P. (12/15)	90,353,254
Grosvenor Monarch Fund, L.L.C. (Series B) (3/11)	593,863,836
ISAM Systematic Trend, L.L.C. (6/15)	126,324,226
Kepos Exotic Beta Fund, L.P. (4/18)	197,965,401
Key Trends 15 Fund, L.L.C. (11/16)	102,790,611
Man Alternative Risk Premia SP (12/17)	298,925,984
PDT Mosaic Offshore Holdings, L.L.C. (6/15)	187,802,066
Penso Fund Platform SPC (11/15)	96,028,320
PIMCO Multi-Asset Volatility Onshore Fund, L.L.C. (5/13)	143,831,213
Robeco Transtrend Diversified Fund, L.L.C. (5/15)	164,134,064
Standard Life Investments Global Absolute Return Strategies Master Fund Ltd. (6/12)	387,197,811
Varadero International, Ltd. (6/14)	257,396,331
Varadero Special Opportunities International, L.P. (6/18)	11,472,681

SECURITIES LENDING

Citibank, N.A. served as the third-party securities lending agent for the fixed income, domestic equity and international equity lending programs. The lending agent is responsible for making loans, acquiring collateral, marking loans and collateral to market on a daily basis and investing cash collateral based on lending agreement terms. The TRS 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 entities. Additional information regarding securities lending activity is included in the Notes to Financial Statements under "Note D. Investments."

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. The following table represents the fair values of the securities lending activity based on type of collateral as of June 30, 2018.

Collateral Type	Collateral Received	Securities on Loan	Collateral %
Cash collateral	$2,248,595,349	$2,181,010,794	103.1%
Non-cash collateral	204,599,161	169,228,755	120.9
Total	**$2,453,194,510**	**$2,350,239,549**	**104.4%**
Reinvested cash collateral	$2,248,612,849		

Sources: State Street Bank and Trust and Citibank, N.A.
Note: Does not include lending collateral with the State Treasurer.

TRS earns income from fees paid by the borrowers and interest earned from investing the cash collateral. For the year ended June 30, 2018, TRS earned net income of $13.4 million through its securities lending program. The following table summarizes fiscal year net income from securities lending activity and the fiscal year averages regarding securities available to loan.

Lending Income for FY18	
Securities lending income	$50,020,810
Borrower rebates	(35,783,163)
Lending agent fees	(854,250)
Securities lending net income	$13,383,397
Loan Averages during FY18	
Available to loan	$19,567,267,280
Securities on loan	2,858,790,832
Percentage on loan	14.6%

Sources: State Street Bank and Trust and Citibank, N.A.

BROKERAGE ACTIVITY

The following table shows the top 50 listed brokers used by TRS external equity managers for the year ended June 30, 2018. TRS also manages a commission recapture program as part of its trading strategies. For the year ended June 30, 2018, TRS recaptured $0.05 million in cash that was reinvested in the fund. In addition, TRS uses commission recapture refunds to pay for Investment Department expenses. During FY18, TRS used $0.2 million of recaptured funds to offset expenses.

Top 50 Brokers Used by TRS Managers

Broker	Shares Traded	FY18 Commission
Instinet, L.L.C. (Worldwide)	565,527,642	$852,002
Citigroup, Inc. and all Subsidiaries (Worldwide)	312,743,221	688,114
Merrill Lynch & Co., Inc. and all Subsidiaries (Worldwide)	118,493,905	563,338
Cowen, Inc.	82,547,606	406,008
UBS AG	69,545,172	360,827
Macquarie Bank & Securities, Ltd. (Worldwide)	115,114,129	341,676
Morgan Stanley & Co., Inc. and Subsidiaries (Worldwide)	81,609,308	325,590
HSBC Bank PLC	43,536,606	297,481
Goldman Sachs & Co. (Worldwide)	73,487,178	294,040
Credit Suisse (Worldwide)	72,562,577	264,124
J.P. Morgan Securities, Inc. (Worldwide)	60,122,730	260,516
Loop Capital Markets, L.L.C.	9,187,914	199,415
Investment Technology Group, Inc. (Worldwide)	75,534,353	190,288
Societe Generale S.A. and all Subsidiaries	70,325,488	188,060
Pershing, L.L.C.	29,389,900	175,927
Barclays (Worldwide)	2,956,749	161,659
Jefferies & Company, Inc.	73,496,200	141,221
Williams Capital Group, L.P.	6,957,879	132,590
Deutsche Bank & Securities (Worldwide)	36,678,482	120,249
BNP Paribas Securities Services S.C.A.	16,411,302	113,430
CL King & Associates, Inc.	4,342,544	108,607
Penserra Securities, L.L.C.	6,010,612	94,006
Sanford Bernstein (Worldwide)	11,174,665	89,096
CLSA Securities	15,942,507	87,382
North South Capital, L.L.C.	4,172,076	84,003
Academy Securities, Inc.	3,013,766	$70,787
Drexel Hamilton, L.L.C.	2,271,053	60,466
Mischler Financial Group	2,578,865	53,118
Bloomberg Tradebook, L.L.C.	1,302,929	38,802
Mirae Asset Daewoo Co., Ltd.	91,585	33,597
Korea Investment Holdings	151,629	33,508
Trade Informatics, L.L.C.	2,295,380	31,916
Telsey Advisory Group	1,131,470	31,789
Exane, Inc.	4,666,653	31,752
Cabrera Capital Markets, Inc.	1,994,721	30,919
Liquidnet, Inc.	3,382,607	30,826
Credit Lyonnais Securities	22,910,426	29,572
SJ Levinson & Sons, L.L.C.	1,484,850	29,283
Stifel Nicolaus & Company, Inc.	880,663	26,951
KeyBanc Capital Markets, Inc.	759,476	25,776
RBC Dain Rauscher (Worldwide)	1,355,484	25,697
KB Financial Group	86,390	25,424
Daiwa Securities Group, Inc.	3,422,589	23,776
Sturdivant & Co., Inc.	609,655	22,210
Raymond James and Associates, Inc. (Worldwide)	1,036,202	21,118
Baird, Robert W., & Company, Inc.	570,171	18,235
Joh. Berenberg, Gossler & Co.	244,414	18,157
Renaissance Capital	3,834,940	15,392
KCG Americas L.L.C.	1,889,774	15,302
Siebert Cisneros Shank & Co., L.L.C.	729,860	15,078
(All Others - 126 Brokers)	113,101,113	518,654
Total	**2,133,667,410**	**$7,817,754**

Sources: State Street Bank and Trust and TRS

INVESTMENT MANAGER AND CUSTODIAN FEES

For the year ended June 30, 2018, fee payments to external investment managers and the master custodian totaled $352.7 million.

Schedule of Fees

Investment Manager/Account	FY18
Acadian Asset Management, L.L.C.	$3,264,919
Advent International GPE VI Limited Partnership	258,377
Advent International GPE VII-C Limited Partnership	877,721
Advent International GPE VIII-B-2 Limited Partnership	1,640,459
AG Direct Lending Fund II, L.P.	641,179
All Weather Portfolio Limited	1,690,433
Alphadyne Global Rates Fund II, Ltd.	18,937,241
AlphaTerra Fund, L.P.	476,869
Altaris Health Partners IV, L.P.	129,177
Apollo Investment Fund VI, L.P.	164,266
Apollo Investment Fund VII, L.P.	401,530
Apollo Investment Fund VIII, L.P.	1,105,920
Apollo Lincoln Fixed Income Fund, L.P.	869,307
Apollo Lincoln Private Credit Fund, L.P.	305,581
AQR Capital Management, L.L.C.	23,643,668
AQR Real Return Offshore Fund, L.P.	2,285,345
Arrowstreet Capital, L.P.	530,669
Astorg VI, SLP	854,193
Ativo Capital Management, L.L.C.	208,570
Axiom International Investors, L.L.C.	4,080,574
The Baring Asia Private Equity Fund V, L.P.	1,117,575
The Baring Asia Private Equity Fund VI, L.P.1	1,337,402
Barings, L.L.C.	3,073,561
Battery Ventures XI-A Side Fund, L.P.	62,311
Battery Ventures XI-A, L.P.	199,732
BIG Real Estate Fund I, L.P.	199,173
Black River Agriculture Fund 2, L.P.	1,237,500
BlackRock Asia Property Fund III, L.P.	8,107
Blackstone Capital Partners VI, L.P.	300,472
Blackstone Real Estate Partners Asia, L.P.	1,172,855
Blackstone Real Estate Partners VI, L.P.	70,061
Blackstone Real Estate Partners VII, L.P.	1,708,627
Blackstone Real Estate Partners VIII.TE.2, L.P.	3,750,000
BNP Paribas Asset Management USA, Inc.	106,250
Brevan Howard Systematic Trading Fund, L.P.	1,571,553
Bridgewater Optimal Portfolio, L.L.C.	5,778,122
Bridgewater Pure Alpha Fund I	4,068,223
Brown Capital Management, L.L.C.	387,354
Capri/Capital Advisors, L.L.C.	2,508,015
Carlson Capital, L.P.	5,940,982

(continued)

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Investment Manager/Account	FY18
Carlyle Europe Real Estate Partners III, L.P.	$290,555
Carlyle Japan International Partners III, L.P.	532,243
Carlyle Partners V, L.P.	57,246
Carlyle Partners VI, L.P.	1,786,173
Carlyle Realty Partners IV, L.P.	125,543
Carlyle Realty Partners VII, L.P.	899,611
Carlyle Realty Partners VIII, L.P.	1,479,401
Carlyle U.S. Growth Fund III, L.P.	114,305
Carlyle/Riverstone Global Energy and Power Fund III, L.P.	129,053
CCP Core Macro Fund, L.P.	246,794
Channing Capital Management, L.L.C.	934,937
Clearlake Capital Partners II, L.P.	(82,832)
Clearlake Capital Partners III, L.P.	9,278
Clearlake Capital Partners IV, L.P.	1,115,631
Clearlake Capital Partners V, L.P.	289,354
Clearlake Opportunities Partners (P), L.P.	637,304
Dimensional Fund Advisors, L.P.	4,721,368
Dolan McEniry Capital Management, L.L.C.	1,742,481
DoubleLine Mortgage Opportunities, L.P.	305,448
Edgewater Growth Capital Partners II, L.P.	163,360
Edgewater Growth Capital Partners III, L.P.	122,836
EIF United States Power Fund IV, L.P.	958,948
Emerald Advisers, Inc.	1,198,226
Energy Capital Partners I, L.P.	26,260
Energy Capital Partners II Annex A	42,056
EQT Midmarket Europe, L.P.	2,840,101
EQT VI, L.P.	893,301
EQT VII, L.P.	1,480,134
EQT VIII, L.P.	207,829
Exeter Value Fund IV, L.P.	690,000
Fortress Japan Opportunity Fund III (Dollar A), L.P.	170,017
Franklin Advisers, Inc.	2,811,860
Franklin Templeton Emerging Market Debt Opportunities (Cayman) Fund, Ltd.	2,160,544
Garcia Hamilton & Associates, L.P.	887,094
Gateway Real Estate Fund IV, L.P.	493,598
GI Partners Fund IV, L.P.	660,509
Global Transport Income Fund Master Partnership SCSp	150,731
Grain Communications Opportunity Fund, L.P.	750,000

(continued)

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Investment Manager/Account	FY18
Granite Ventures II, L.P.	$107,671
Great Point Partners II, L.P.	246,565
Green Equity Investors VI, L.P.	935,101
Greenspring IL Master, L.P.	215,831
Grosvenor Monarch Fund, L.L.C.	2,296,125
Harvest Partners Structured Capital Fund II, L.P.	83,641
Heitman Capital Management, L.L.C.	7,993,240
Hopewell Ventures, L.P.	66,456
IC Hospitality Fund II, L.P.	133,844
ICV Partners IV, L.P.	956,610
IL Asia Investors, L.P.	713,069
Inflexion Buyout Fund V, L.P.	296,114
Institutional Venture Partners XV, L.P.	876,516
Institutional Venture Partners XVI, L.P.	481,034
Invesco Institutional (N.A.), Inc.	3,358,121
ISAM Systematic Trend, L.L.C.	1,727,961
JMI Equity Fund VII, L.P.	367,512
JMI Equity Fund VIII-A, L.P.	438,000
JP Morgan Investment Management, Inc.	4,373,379
JP Morgan Management Associates, L.L.C.	4,467,326
Kepos Exotic Beta Fund, L.P.	306,250
Key Trends 15 Fund, L.L.C.	1,000,688
LaSalle Asia Opportunity Fund IV, L.P.	514,817
LCM Partners CO IIIa, L.P.	433,385
Lee Overlay Partners Limited	70,000
Levin Capital Strategies, L.P.	1,045,818
Lightspeed Venture Partners IX, L.P.	724,749
Lightspeed Venture Partners Select II, L.P.	225,008
Lightspeed Venture Partners Select, L.P.	365,062
Lightspeed Venture Partners X, L.P.	329,373
Lightspeed Venture Partners XI, L.P.	272,146
Lion Industrial Trust	3,706,482
Littlejohn Fund IV, L.P.	417,464
LiveOak Venture Partners I, L.P.	427,500
Lone Star Real Estate Fund III (U.S.), L.P.	77,297
Lone Star Real Estate Fund IV (U.S.), L.P.	684,926
Lone Star Real Estate Fund V (U.S.), L.P.	6,361,839
Longitude Venture Partners II, L.P.	391,865
Longitude Venture Partners III, L.P.	895,352
Longitude Venture Partners, L.P.	58,283
LPC Realty Advisors I, Ltd.	4,423,505
LSV Asset Management	7,901,198
MacKay Shields, L.L.C.	2,406,586
Madison Dearborn Capital Partners VII, L.P.	991,462
Madison International Real Estate Liquidity Fund VI (TE), L.P.	1,282,877
Magnetar Constellation Fund IV, L.L.C.	1,243,555

(continued)

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Investment Manager/Account	FY18
Magnetar Constellation Fund V, L.L.C.	$470,406
Man Alternative Risk Premia SP	1,534,583
Manulife Asset Management, L.L.C.	386,298
Maranon Mezzanine Fund, L.P.	31,572
Maranon Senior Credit Fund II-B, L.P.	324,654
Marlin Equity V, L.P.	691,184
Matarin Capital Management, L.L.C.	118,074
MBK Partners Fund III Annex B	(2,332)
MBK Partners Fund III, L.P.	666,622
MBK Partners Fund IV, L.P.	1,837,295
McKinley Capital Management, Inc.	840,244
Mondrian Investment Partners Limited	4,200,622
Morgan Creek Partners Asia, L.P.	802,221
Morgan Creek Partners Venture Access Fund, L.P.	552,913
New Century Advisors, L.L.C.	214,315
New Enterprise Associates 15, L.P.	330,365
New Enterprise Associates 16, L.P.	499,721
New Mountain Partners IV, L.P.	160,349
New Mountain Partners V, L.P.	1,804,561
NGP Natural Resources X, L.P.	845,453
NGP Natural Resources XI, L.P.	1,412,615
NGP Natural Resources XII, L.P.	1,147,260
Niam Nordic V, L.P.	208,861
Northern Shipping Fund III, L.P.	957,596
Northern Trust Investments, Inc.	639,503
NXT Capital Senior Loan Fund II, L.P.	360,140
NXT Capital Senior Loan Fund IV, L.P.	1,997,382
NXT Capital Senior Loan Fund V, L.P.	197,545
Oak Street Real Estate Capital Fund III, L.P.	215,199
Oak Street Real Estate Capital Fund IV, L.P.	78,820
Oaktree Enhanced Income Fund II, L.P.	1,997,550
Oaktree Enhanced Income Fund III, L.P.	2,052,189
Oaktree Enhanced Income Fund, L.P.	117
Oaktree European Principal Fund III, L.P.	786,595
Oaktree Opportunities Fund IX, L.P.	1,356,588
Oaktree Opportunities Fund VIII, L.P.	332,151
Oaktree Real Estate Debt Fund II, L.P.	444,060
Oaktree Real Estate Debt Fund, L.P.	345,332
OCM European Principal Opportunities Fund II, L.P.	428,181
OCM Opportunities Fund VIIb, L.P.	116,361
Pacific Investment Management Company, L.L.C.	23,573,118
Palladium Equity Partners IV, L.P.	115,157
Parthenon Investors V, L.P.	1,734,627
PDT Partners, L.L.C.	7,568,149
Pemberton Debt Fund Delaware I, L.P.	804,249

(continued)

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Investment Manager/Account	FY18
Penso Fund Platform SPC	$930,909
PGIM Fixed Income Global Liquidity Relative Value Fund I (Cayman), Ltd.	4,867,746
PGIM Fixed Income U.S. Liquidity Relative Value Fund I (Cayman), Ltd.	880,401
PGIM, Inc.	1,112,471
PIMCO BRAVO Fund III Onshore Feeder, L.P.	220,679
PIMCO BRAVO Fund Onshore Feeder I, L.P.	58,283
PIMCO BRAVO Fund Onshore Feeder II, L.P.	1,740,481
Pine Brook Capital Partners, L.P.	237,785
Principal Real Estate Investors, L.L.C.	976,776
Prism Mezzanine Fund, L.P.	112,976
Providence Equity Partners VI, L.P.	149,719
Providence Equity Partners VII, L.P.	2,070,875
Quadratic Capital Management L.L.C.	327,097
Ramirez Asset Management, Inc.	103,658
RCP SBO Fund, L.P.	387,500
Rhone Partners IV, L.P.	192,404
Rhone Partners V, L.P.	1,420,191
RhumbLine Advisers, L.P.	257,932
Riverstone Credit Partners II, L.P.	116,209
Riverstone Credit Partners, L.P.	573,616
Riverstone Global Energy and Power Fund V, L.P.	1,474,932
Riverstone Global Energy and Power Fund VI, L.P.	2,067,827
Riverstone/Carlyle Global Energy and Power Fund IV, L.P.	119,459
Robeco Boston Partners Asset Management, L.P.	1,192,262
Robeco Transtrend Diversified Fund L.L.C.	1,752,388
Rockpoint Real Estate Fund V, L.P.	1,374,999
RRJ Capital Master Fund III, L.P.	1,294,951
Scale Venture Partners V, L.P.	600,000
SCP Illinois. L.L.C.	79,221
Sheridan Production Partners III-B, L.P.	1,125,000
Silver Lake Partners III, L.P.	185,222
Silver Lake Partners IV, L.P.	1,431,579
Silver Lake Partners V, L.P.	1,020,000
Siris Partners II, L.P.	404,747
Siris Partners III, L.P.	1,056,997
Sofinnova Venture Partners IX, L.P.	1,120,175
Sofinnova Venture Partners VIII, L.P.	729,194
Sofinnova Venture Partners X, L.P.	999,137
Southwest Multifamily Partners, L.P.	210,644
Standard Life Investments Global Absolute Return Strategies Master Fund Ltd.	5,005,827

(continued)

(continued)

Investment Manager/Account	FY18
StarVest Partners II, L.P.	$105,508
Starwood Distressed Opportunity Fund IX Global, L.P.	1,286,343
Starwood IX Annex A	305,343
Starwood Opportunity Fund X Global, L.P.	2,673,424
Starwood Value Add Fund, L.P.	534,274
Starwood X Annex A	14,432
Starwood X Annex B	47,153
State Street Bank and Trust Company (Custody)	2,531,250
Strategic Global Advisors, L.L.C.	2,812,886
Sunstone Partners I, L.P.	334,637
T. Rowe Price Associates, Inc.	2,052,214
TA XII-A, L.P.	2,156,519
Taplin, Canida & Habacht, L.L.C.	841,972
Taurus Mining Finance Annex Fund L.L.C.	365,625
Taurus Mining Finance Fund L.L.C.	1,000,000
TCW Asset Management Company	2,644,316
Tourbillon Global Equities, L.L.C.	2,461,589
Trident V, L.P.	764,033
Trident VI, L.P.	895,019
Trident VII, L.P.	1,825,549
Trustbridge Partners IV, L.P.	475,906
Union Grove Partners Direct Venture Fund, L.P.	118,374
Union Grove Partners Venture Access Fund II, L.P.	284,108
Union Grove Partners Venture Access Fund, L.P.	532,047
Varadero International, Ltd.	8,022,919
Varadero Special Opportunities International, L.P.	1,676
Veritas Capital Fund VI, L.P.	1,637,428
Vicente Capital Partners Growth Equity Fund, L.P.	93,762
Vista Credit Opportunities Fund I-B, L.P.	569,438
Vista Equity Partners Fund III, L.P.	88,860
Vista Equity Partners Fund IV, L.P.	558,315
Vista Equity Partners Fund V, L.P.	2,957,964
Vista Equity Partners Fund VI, L.P.	1,626,455
Vista Foundation Fund III, L.P.	905,826
Walton Street Real Estate Fund VI, L.P.	477,677
Walton Street Real Estate Fund VII, L.P.	1,208,323
Wasatch Advisors, Inc.	3,278,861
West Street Global Infrastructure Partners III, L.P.	1,687,500
Westbrook Real Estate Fund X, L.P.	1,645,770
Total fees paid by TRS	**$352,680,802**

ACTUARIAL

ARTS, CULTURE, SOCIETY & RELIGION

1839 – Joseph Smith chose Nauvoo, on the banks of the Mississippi River, as the new home of the Church of Jesus Christ of Latter Day Saints. Following the murder of Joseph Smith, in 1846 the Church left Illinois for Utah.

1853 – The first Illinois State Fair was held in Springfield.

1866 – The second-oldest symphony orchestra in the United States, the Belleville Philharmonic, was founded.

1891 – The Chicago Symphony Orchestra was founded.

1893 – The World's Columbian Exposition was held in Chicago to commemorate the 400th anniversary of Columbus's arrival in the "new world."

1889 – Jane Addams and Ellen Gates Starr founded Hull House in Chicago.

1900 – The *Wonderful Wizard of Oz* was published in Chicago.

1910 – The Boy Scouts of America was founded in Ottawa by William Boyce.

1915 – Edgar Lee Masters' *Spoon River Anthology* was published.

1917 – The first radio station in Illinois, WDZ, was established in Tuscola. It continues to broadcast in Decatur as WDZ-AM.

1931 – Jane Addams, founder of Hull House, won the Nobel Peace Prize.

1933 – The Century of Progress International Exposition was held in Chicago.

1940 – The first television station in Illinois, WBKB-TV, was established in Chicago.

1950 – Gwendolyn Brooks became the first African-American woman to win a Pulitzer Prize.

1976 – Saul Bellow of Chicago won the Nobel Prize in Literature.

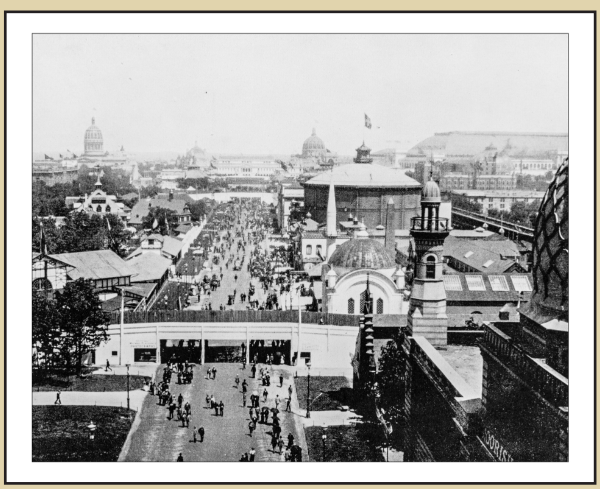
1982 – Cahokia Mounds State Historic Site in Collinsville was designated a World Heritage Site by the United Nations.

Pencil drawing by TRS employee Julie Dailey

THE MAIN GATE OF THE ILLINOIS STATE FAIRGROUNDS

CAHOKIA MOUNDS

CHICAGO SYMPHONY ORCHESTRA



THE 1893 WORLD'S COLUMBIAN EXPOSITION

Segal Consulting

101 NORTH WACKER DRIVE, SUITE 500 CHICAGO, IL 60606
T 312.984.8500 F 312.984.8590 www.segalco.com

December 4, 2018

Board of Trustees
Teachers' Retirement System of the State of Illinois
2815 West Washington Street
Springfield, Illinois 62702

ACTUARIAL CERTIFICATION

Ladies and Gentlemen:

This report presents the results of the annual valuation of the assets and liabilities of the Teachers' Retirement System of the State of Illinois (TRS or System) as of June 30, 2018, prepared in accordance with the funding policy specified under the Illinois Pension Code (40 ILCS 5/16). This valuation takes into account all of the pension benefits to which members are entitled.

Actuarial Assumptions and Methods

The valuation was based on the actuarial assumptions adopted by the Board of Trustees, reflecting the three-year demographic and economic experience review covering the period July 1, 2014, through June 30, 2017, presented at the August 2018 Board meeting. In our opinion, the actuarial assumptions used are reasonable, taking into account the experience of the System and reasonable long-term expectations, and represent our best estimate of the anticipated long-term experience of the System. The actuarial assumptions and methods used for funding purposes meet the parameters set by Actuarial Standards of Practice. The methods mandated by the Illinois Pension Code as described in the Funding Adequacy section are inadequate to appropriately fund TRS.

Assets and Membership Data

TRS reported the individual data for members of the System as of the prior valuation date to the actuary. Valuation results are projected, based upon the actuarial assumptions, to account for the one-year difference between the date of the census data and the valuation date. The amount of assets in the trust fund as of the valuation date was based on statements prepared by TRS.

Funding Adequacy

The member and employer contribution rates are determined in accordance with the funding policy specified under the Illinois Pension Code (40 ILCS 5/16). The member contribution rate is 9.0%, which is comprised of 7.5% toward the cost of the retirement annuity, 0.5% toward the cost of the automatic annual increase in the retirement annuity and 1.0% for survivor benefits. The employer contributions are determined such that, together with the member contributions, the plan is projected to achieve 90% funding by 2045. The 2045 funding objective of 90% was set in 1994 as a 50-year objective. TRS members have always contributed their share. **The State funding has been inadequate, resulting in TRS being among the worst funded public employee retirement systems in the United States. We strongly recommend an actuarial funding method that targets 100% funding where payments at least cover interest on the unfunded actuarial accrued liability and a portion of the principal balance.** The funding policy adopted by the Board, referred to as the Board Funding Policy, meets this standard.

The valuation indicates that for the fiscal year ending June 30, 2018, the actuarial experience of TRS was unfavorable, generating a net actuarial loss of $1,035 million (0.8% of the actuarial accrued liability). This loss is the net result of a $307 million gain due to favorable investment return experience and a $1,342 million net loss due to demographic experience in fiscal 2018.

Actuarial Certification

In preparing the results presented in this report, we have relied upon information TRS provided to us regarding the benefit provisions, System members, benefit payments and unaudited plan assets. While the scope of our engagement did not call for us to perform an audit or independent verification of this information, we have reviewed this information for reasonableness. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information.

There is a schedule of Required Supplementary Information in the Financial Section of the System's Annual Financial Report. Segal has provided the Schedule of Changes in the Net Pension Liability, the Schedule of the Net Pension Liability, and the Schedule of Contributions from Employers and Other Contributing Entities. Segal reviewed this information in the Required Supplementary Information and the Notes to Required Supplementary Information to verify its consistency with the valuation report.

The Actuarial Section of the System's Annual Financial Report contains the following schedules, which were not prepared by Segal, but were reviewed by Segal for consistency with the valuation report: Actuarial Valuation, Reconciliation of Unfunded Liability, State Funding Amounts, Unfunded Liability as a Percentage of Payroll Test, and Schedule of Contributions from Employers and Other Contributing Entities. The Actuarial Section also contains the following schedules, which were prepared by Segal: Funded Ratio Test, Solvency Test, Employer Normal Cost by Tier, and Funded Ratio by Tier. Segal neither reviewed nor prepared any items beyond those specifically listed in this paragraph and the preceding paragraph.

In our opinion, the results presented comply with the Illinois Pension Code and, where applicable, the Internal Revenue Code, and the Statements of the Governmental Accounting Standards Board. While all calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board, this does not endorse the funding methodology required by the Illinois Pension Code. The undersigned are independent actuaries. They are Fellows of the Society of Actuaries, Enrolled Actuaries, and Members of the American Academy of Actuaries, and are experienced in performing valuations for large public retirement systems. They meet the Qualification Standards of the American Academy of Actuaries.

Respectfully submitted,

Segal Consulting, a Member of the Segal Group

By:

Kim Nicholl, FSA, MAAA, EA
Senior Vice President and Actuary

Matthew A. Strom, FSA, MAAA, EA
Vice President and Actuary

Jake Libauskas, FSA, MAAA, EA
Consulting Actuary

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The Actuarial Section of this report discusses the System's funded status and measures changes in its financial condition over time. The actuarial accrued liability, actuarial value of assets and unfunded liability presented in this section are used to determine state funding requirements. The total pension liability, plan fiduciary net position and net pension liability are used for financial disclosure only and are required by GASB Statement No. 67. For the GASB disclosure, please see the Financial Section of this report: "Notes to Financial Statements, A. Plan Description, 6. Actuarial Measurements."

Pursuant to Public Act 97-0674, the Office of the Auditor General employs a state actuary, Cheiron, to review the five state systems' actuarial valuation reports. The reports are considered preliminary until the state actuary has reviewed them. In its review of the June 30, 2017 preliminary report prepared by Segal Consulting, Cheiron did not recommend any changes in actuarial assumptions or calculations. Cheiron suggested additional disclosure on stress testing, but this has not been included in the 2018 preliminary actuarial valuation.

TRS and Segal believe this type of analysis is better suited for discussion with input from the TRS Board of Trustees, staff, the actuary and the TRS general investment consultant, RVK, Inc. However, additional disclosure on the types of risk faced by the plan has been added to the report. The preliminary June 30, 2018 actuarial valuation prepared by Segal Consulting has been submitted to the state actuary.

ACTUARIAL ASSUMPTIONS AND METHODS

Each year the actuary reconciles the differences between actuarial assumptions and experience to explain the change in TRS's unfunded liability. The unfunded liability is the difference between the accrued liability (the present value of benefits including the cost of annual increases) and the assets that are available to cover the liability.

Most assumptions were adopted in the FY18 valuation and are based on the 2018 experience analysis unless otherwise noted.

INVESTMENT RETURN

The investment return rate is 7.0 percent per annum, compounded annually and net of investment expenses, including inflation at 2.5 percent and real return at 4.5 percent. This is the expected rate of return on investments adopted effective June 30, 2016 and is also used to discount benefit payments. These rates were adopted in the FY16 valuation.

SALARY INCREASES

Components of the salary increase assumption include:

- inflation of: 2.5 percent and
- real wage growth (productivity) of: 0.75 percent.

The sample annual percentage salary increases (including merit and components of increase listed previously) are below.

Salary Increase Assumptions

Service	Male and Female
1 year	9.50%
2 years	7.50
3 years	7.00
4 years	6.75
5 years	6.50
10 years	5.50
15 years	4.75
20 years and above	4.00

For a member who works 34 years, the assumed average salary increase over the member's career is 4.94 percent per year.

INFLATION

Inflation is assumed to be 2.5 percent per annum and is implicit in investment and earnings progression assumptions. This rate was adopted in the FY16 valuation.

RETIREMENT AGE

Graduated rates are based on age and service of active members at retirement.

Sample annual retirement rates follow. The Tier 1 rates were revised in 2018 and the Tier 2 rates were revised in 2012.

Tier 1 is composed of members who entered into service before Jan. 1, 2011:

Tier 1 Retirement Assumptions

	Years of Service				
Age	5-18	19-29	30-31	32-33	34+
54	-%	7%	8%	40%	45%
55	-	7	8	40	45
60	20	30	40	60	40
65	25	40	45	50	40
70	100	100	100	50	30
75	100	100	100	100	100

Tier 2 is composed of those entering into service on or after Jan. 1, 2011:

Tier 2 Retirement Assumptions

	Years of Service				
Age	9-18	19-30	31	32-33	34+
62	13%	15%	20%	25%	25%
65	8	10	15	20	20
67	20	40	70	70	70
70	100	100	100	100	100

MORTALITY

The assumed mortality rates are based on the Society of Actuaries RP-2014 mortality tables with adjustments as appropriate for TRS experience. The rates are used on a fully generational basis using projection table MP-2017.

For retirees, the RP-2014 White Collar Annuitant table:

- female rates are multiplied by 70 percent for ages under 78 and 110 percent for ages 78 to 114 and
- male rates are multiplied by 94 percent for ages under 81 and 110 percent for ages 81-114.

For disabled members, the RP-2014 Disabled Retiree table is used with male and female rates multiplied by 117 percent for ages 45-99.

For beneficiaries, the RP-2014 Annuitant table is used with male and female rates multiplied by 116 percent and 96 percent, respectively, for ages 50-114.

For active and inactive members, the RP-2014 White Collar Employee table is used with male and female rates multiplied by 104 percent for all ages.

DISABILITY

Here are the sample annual disability rates:

Disability Assumptions

Age	Male	Female
25	0.01%	0.03%
30	0.01	0.04
40	0.03	0.07
50	0.10	0.18
55	0.14	0.20
60	0.18	0.27
65	0.25	0.30

TERMINATION FROM ACTIVE SERVICE

Here are the sample annual termination rates (for reasons other than death, disability or retirement):

Termination Assumptions

	Under 5 Yrs of Service		5 or More Yrs of Service	
Age	Male	Female	Male	Female
25	7.0%	6.5%	3.0%	5.0%
30	6.5	7.0	3.0	4.8
40	10.0	8.0	1.8	1.5
50	12.0	8.0	1.3	1.5
55	11.5	11.8	2.0	2.0
60	15.0	14.0	3.0	2.5
65	30.0	30.0	3.0	3.0

SEVERANCE PAY

The percent of retirees from active service assumed to receive severance pay and the amount of such severance payments are assumed to be as follows and are not applicable to Tier 2.

Severance Pay Assumptions

Percent Retiring with Severance Pay	Severance Pay as a Percent of Other Pensionable Earnings in Last Year of Service
20%	10.0%

OPTIONAL SERVICE AT RETIREMENT

The accrued liability for retirement benefits for active members who have not previously purchased optional service is increased to cover the employer cost of optional service purchased in the last two years of service. The sample purchases at retirement follow.

Optional Service Assumptions

Years of Regular Service at Retirement	Maximum Service Purchased
10	0.107 years
20	0.445 years
25	0.752 years
30	0.841 years
34 or more	None

UNUSED AND UNCOMPENSATED SICK LEAVE

Unused and uncompensated sick leave varies by the amount of regular service at retirement.

The sample amounts of sick leave at retirement are:

Sick Leave Assumptions

Years of Service at Retirement	Sick Leave Service Credit
20	0.953 years
25	1.137 years
30	1.376 years
34	1.387 years
35 or more	None

POST-RETIREMENT INCREASES

Tier 1: 3%, compounded (statutory).

Tier 2: 1.25%, not compounded (adopted in 2016 valuation).

ACTUARIAL COST METHOD

The actuarial cost method required by the Illinois Pension Code is projected unit credit, which was adopted in the FY89 valuation as required by Public Act 86-0273. The entry age normal cost method has been the basis of the TRS board's funding policy since FY15 and is used for financial reporting under GASB Statement No. 67.

ASSET VALUATION METHOD

The practice of five-year prospective asset smoothing was adopted in the FY09 valuation as required by Public Act 96-0043.

ACCELERATED BENEFIT PROGRAMS

Under the programs established by Public Act 100-0587 that expire June 30, 2021:

- 22 percent of eligible Tier 1 and Tier 2 inactive members are assumed to participate in the Accelerated Pension Benefit Program.
- 25 percent of new Tier 1 retirees are assumed to participate in the Accelerated Annual Increase Program.

These are based on the experience of the state of Missouri and were used by the Illinois legislature in its analysis.

ACTUARIAL EXPERIENCE ANALYSIS

In an actuarial experience analysis, a retirement system's assumptions about future events are compared to its experience to determine whether the assumptions should be revised. In 2018, TRS actuaries conducted an analysis for the three years ending June 30, 2017. Based on their study, the actuaries recommended changes in assumptions that were adopted by the TRS Board of Trustees in the June 30, 2018 actuarial valuation.

The following changes in assumptions were adopted by the TRS Board of Trustees:

- Higher salary increases and severance payments
- Lower termination rates
- Lower disability rates
- Adjustments in Tier 1 retirement rates and updates in the service groups to which the rates are applied
- Updates to the healthy, disabled and beneficiary post-retirement mortality assumptions to better reflect plan experience
- Update to the mortality improvement scale from Scale MP-2014 to Scale MP-2017
- Less assumed sick leave at retirement for most service increments
- Lower utilization of optional service

The net effect of all the changes in assumptions was a decrease in the June 30, 2018 unfunded liability of $712 million.

The rate of return was maintained at 7.0 percent, as were the rate of inflation at 2.5 percent and the real rate of return at 4.5 percent.

In addition to the review of all the assumptions that is conducted every three years, the major economic assumptions are reviewed every year. This more frequent review was recommended by the state actuary.

ANNUAL ACTUARIAL VALUATION

The annual actuarial valuation measures the total liability for all benefits earned to date. The accrued liability is a present value estimate of all the benefits that have been earned to date but not yet paid. The unfunded liability is the present value of future benefits payable that are not covered by the assets on the valuation date.

The funded ratio shows the percentage of the accrued liability covered by assets. The following tables show the funded ratio based on the actuarial value of assets and the fair value of assets.

Actuarial Valuation ($ thousands)

	Year ended June 30, 2018
Based on actuarial value of assets	
Total actuarial accrued liability	$127,019,330
Less actuarial value of assets*	51,730,890
Unfunded liability	**$75,288,440**
Funded ratio*	40.7%
Based on fair value of assets	
Total actuarial accrued liability	$127,019,330
Less assets at fair value	51,969,547
Unfunded liability	**$75,049,783**
Funded ratio	40.9%

** Five-year prospective smoothing began in FY09.*

ANALYSIS OF FINANCIAL EXPERIENCE: RECONCILIATION OF UNFUNDED LIABILITY

The $1.9 billion net increase in the 2018 unfunded liability was caused by a combination of factors.

The first factor shown in the table is the difference between actual employer/state contributions and the amount that would cover the employer/state's cost of benefits earned during the year and prevent the prior year’s unfunded liability from growing. That shortfall was $1.9 billion.

Actuarial gains and losses occurred under the other assumptions. The most significant gain was on investments, which includes 20 percent of the difference between expected and actual returns in FY18 and decreased the unfunded liability by $307 million during the year. Other actuarial gains occurred under the assumptions for salary increases, disabilities and new members, meaning that experience was more favorable (less costly) than assumed.

Actuarial losses occurred under the assumptions for retirement, terminations, mortality and rehires (members coming back into teaching service). The most significant actuarial loss was under the "other" category. The loss of $983 million is a balancing item and includes corrections to various calculations and methodologies that will prevent additional losses due to these items from occurring in the future. The net effect of the actuarial gains and losses was an increase in the unfunded liability of $1.0 billion.

Reductions in the unfunded liability occurred because of changes in actuarial assumptions adopted in the June 30, 2018 actuarial valuation. Based on the 2018 experience analysis, the net effect of the assumptions adopted by the board was a reduction in the unfunded liability of $712 million.

Further reductions in the unfunded liability were due to the assumed impact of the temporary accelerated pension benefit payments described in the Financial Section under "Legislative." The actuaries based their analysis on the same assumptions that the Illinois legislature did in enacting the programs; actual TRS experience could be significantly different. The $381 million reduction in the 2018 unfunded liability is the portion of the liability that would not be owed to program participants because the payments will be less than the present value of the benefits eligible under the two programs.

In summary, the $1.9 billion increase in the unfunded liability is due to the $1.9 billion employer cost in excess of contributions, with the $1.0 billion increase due to experience and the $1.0 billion reduction due to assumption changes and accelerated benefit programs having a net effect of zero.

Reconciliation of Unfunded Liability

Reconciliation of Unfunded Actuarial Accrued Liability	Year Ended June 30, 2018
Unfunded liability at beginning of year	**$73,436,509,059**
Additions	
Employer cost in excess of contributions	1,909,537,067
Experience (gain)/loss compared to assumptions:	
Investment earnings on actuarial value of assets*	(306,966,173)
Salary increases for continuing active members	(40,293,935)
Retirements	341,957,544
Disabilities	(24,275,853)
Terminations	19,458,838
Mortality	42,624,422
Rehires	36,264,543
New entrants	(16,845,581)
Other	983,112,072
Net experience loss	**1,035,035,877**
Reductions	
Changes in actuarial assumptions and methods	(711,686,423)
Assumed reduction due to PA 100-0587	(380,955,376)
Total reductions	**(1,092,641,799)**
Net increase in unfunded liability	**1,851,931,145**
Unfunded liability at end of year	**$75,288,440,204**

** Assets were expected to earn 7.0 percent during the year ended June 30, 2018. This item is the difference between the expected and the actual return on an actuarial basis. For example, in FY18, the actual return of $3.719 billion was greater than the expected actuarial return of $3.412 billion, resulting in an actuarial gain which decreased the unfunded pension benefit liability by $0.307 billion.*

ACTUARIAL STANDARDS AND ILLINOIS STATE PENSION FUNDING

In 2012, the TRS Board of Trustees resolved to begin certifying state funding amounts that were in accordance with generally accepted actuarial principles and standards. These amounts have been submitted in addition to the amounts calculated under Illinois law. The board's purpose is to illustrate the gap between sound funding policy and current practice.

Additional amounts certified by the board from 2012 through 2014 would have begun amortizing the unfunded liability over an open 30-year period or would have stabilized it by paying the accruing interest. Over time, however, actuarial standards have evolved and become more stringent.

In 2015, the board adopted the actuary's recommendation to shorten the amortization period under its alternative certification to 20 years. In this scenario, the amortization payments would increase by 2 percent per year, which is the actuary's estimate of the increase in Illinois revenue. Future increases in the unfunded liability would be amortized over subsequent 20-year periods (layered amortization). Additionally, the actuarial accrued liability and the employer's normal cost would be calculated under the entry age normal actuarial cost method, which is widely used in the public sector. Entry age would assign costs more evenly over an employee's career. It would replace the projected unit credit actuarial cost method that is required under current law. The projected unit credit method has the effect of delaying the cost of a member's service and deferring contributions, thereby leading to higher costs in the long run.

STATE FUNDING

Public Act 88-0593 was enacted in 1994 and first affected state contributions in FY96. The law established a 50-year funding plan that includes a 15-year phase-in period. By the end of the funding period in FY45, TRS will have a 90 percent funded ratio. A key feature of this act is the "continuing appropriation" language that requires state contributions to be made automatically to TRS, provided state funds are available.

Public Act 93-0002, the pension obligation bond legislation, was enacted in 2003 and first affected state contributions in FY05. The law requires a multi-step process that ensures that state contributions through FY33 do not exceed certain maximums. After FY33, contributions are higher than they would have been without the maximums.

Public Act 100-0023, enacted in 2017, made two changes that affected TRS funding and required TRS to recertify the FY18 state contribution. First, changes in actuarial assumptions made since the FY12 actuarial valuation are to be phased in over five-year periods to reduce volatility in the state contribution. Second, the act requires employers to contribute to TRS an amount that covers the employer normal cost on earnings that exceed the governor's statutory salary.

STATE FUNDING AMOUNTS

The FY19 certified state contributions are based on the June 30, 2017 actuarial valuation and the FY20 certifications are based on the June 30, 2018 actuarial valuation. The state actuary will review the proposed certifications for FY20 as well as the June 30, 2018 valuation. Final certifications are due Jan. 15, 2019 pursuant to Public Act 97-0674.

The following table shows funding requirements under the statutory funding plan and the TRS Board of Trustee's funding plan that was adopted in 2015.

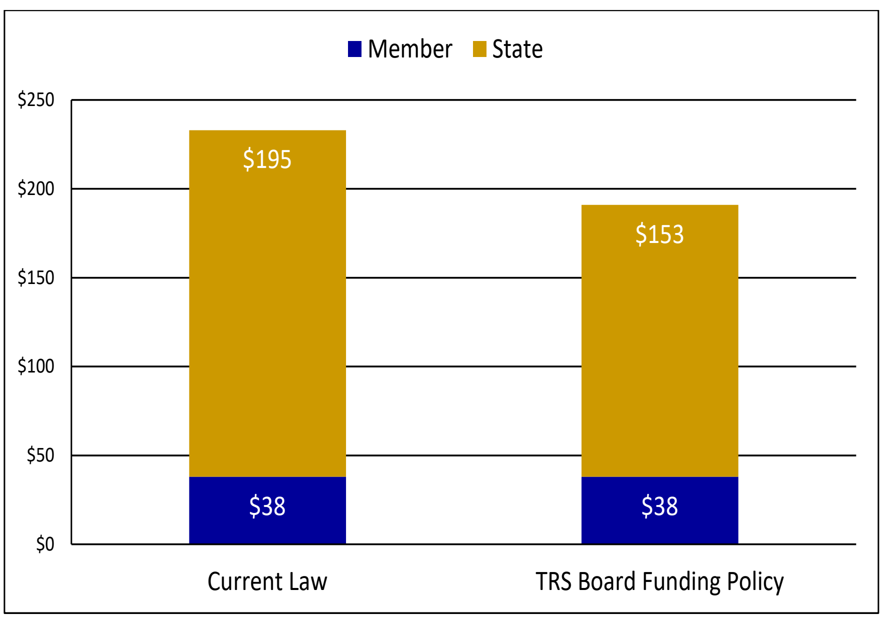
FY19 & FY20 State Contribution Requirements

	FY19 Requirements*	FY20 Requirements
Based on Statutory Funding Plan		
Benefit Trust Reserve	$4,465,578,109	$4,813,077,696
Minimum Annuity Reserve	600,000	500,000
Total State Contribution	$4,466,178,109	$4,813,577,696
Based on TRS Board Funding Policy		
Benefit Trust Reserve	$7,370,330,484	$7,878,170,709
Minimum Annuity Reserve	600,000	500,000
Total State Contribution	$7,370,930,484	$7,878,670,709
Employer Normal Cost Rate		
Tier 1	12.65%	13.75%
Tier 2	(1.89%)	(1.48%)
Combined	9.85%	10.66%

**FY19 state contribution must be recertified in June 2019, pursuant to PA 100-0587. Shown are the original amounts.*

Under the TRS Board of Trustee's funding policy, the state funding requirement is initially higher than under the statutory plan because it begins reducing the unfunded liability immediately. Over time, however, funding based on this actuarial standard greatly reduces state contributions because it reduces the finance charges that occur under the statutory plan. Under the board's funding policy, total state contributions through FY45 would be $42 billion lower than under current law.

State and Member Required Contributions FY20-FY45 ($ billions)



TESTS OF FINANCIAL CONDITION

The funded ratio shows the percentage of the accrued liability covered by actuarial value of assets.

Funded Ratio Test ($ thousands)

		Assets		Unfunded Liability using Assets based on		Funded Ratio using Assets based on	
As of June 30	Actuarial Accrued Liability	Actuarial Value [1]	Fair Value[2]	Actuarial Value [1]	Fair Value[2]	Actuarial Value [1]	Fair Value[2]
2009	$73,027,198	$38,026,044	$28,497,729[3]	$35,001,154	$44,529,469	52.1%	39.0%
2010	77,293,198	37,439,092	31,323,784	39,854,106	45,969,414	48.4	40.5
2011	81,299,745	37,769,753	37,471,267	43,529,992	43,828,478	46.5	46.1
2012	90,024,945	37,945,397	36,516,825	52,079,548	53,508,120	42.1	40.6
2013	93,886,988	38,155,191	39,858,768	55,731,797	54,028,220	40.6	42.5
2014	103,740,377	42,150,765	45,824,383	61,589,612	57,915,994	40.6	44.2
2015	108,121,825	45,435,193	46,406,916	62,686,632	61,714,909	42.0	42.9
2016	118,629,890	47,222,098	45,250,957	71,407,792	73,378,933	39.8	38.1
2017	122,904,034	49,467,525	49,375,665	73,436,509	73,528,369	40.2	40.2
2018	**127,019,330**	**51,730,890**	**51,969,547**	**75,288,440**	**75,049,783**	**40.7**	**40.9**

1. *Five-year prospective smoothing began in FY09 for gains and losses on investments.*
2. *The fair value of assets is no longer used for determining state funding requirements but is shown here for comparative purposes.*
3. *The FY09 fair value of assets is the final, actual figure. The actuary's report shows a slightly higher funded ratio of 39.1 percent for 2009 because the fair value of assets was lowered after the actuarial results were certified.*

The unfunded liability as a percentage of payroll is a standard measure of the relative size of the unfunded liability. Increases in this percentage indicate deterioration in a system's financial position.

Unfunded Liability as a Percentage of Payroll Test Based on Actuarial Value of Assets ($ thousands)

Year Ended June 30	Approximate Member Payroll*	Unfunded Liability	Percentage of Payroll
2009	$8,945,021	$35,001,154	391.3%
2010	9,251,139	39,854,106	430.8
2011	9,205,603	43,529,992	472.9
2012	9,321,098	52,079,548	558.7
2013	9,394,741	55,731,797	593.2
2014	9,512,810	61,589,612	647.4
2015	9,641,171	62,686,632	650.2
2016	9,811,614	71,407,792	727.8
2017	9,965,570	73,436,509	736.9
2018	**10,163,980**	**75,288,440**	**740.7**

** Payroll supplied by TRS*

The solvency test measures TRS's ability to cover different types of obligations if the plan was terminated and is hypothetical. The columns are in the order that assets would be used to cover certain types of obligations. Employee contributions would be refunded first, amounts due for participants currently receiving benefits would be covered next and the employer's obligation for active members would be covered last. Columns (1) and (2) should be fully covered by assets. The portion of column (3) that is covered by assets should increase over time.

Solvency Test ($ thousands)

	Aggregate Accrued Liabilities for				Percentage of Benefits Covered by Net Assets		
Year Ended June 30	Members' Accumulated Contributions (1)	Participants Currently Receiving Benefits) (2)	Active Members Employer Portion (3)	Actuarial Value of Assets*	(1)	(2)	(3)
2009	$7,320,600	$44,495,917	$21,210,681	$38,026,044	100%	69%	-
2010	7,715,984	47,475,906	22,101,308	37,439,092	100	63	-
2011	8,048,689	50,567,881	22,683,175	37,769,753	100	59	-
2012	8,270,073	58,734,636	23,020,236	37,945,397	100	51	-
2013	8,569,939	61,254,334	24,062,715	38,155,191	100	48	-
2014	8,890,558	65,614,627	29,235,192	42,150,765	100	51	-
2015	9,281,893	70,545,782	28,294,150	45,435,193	100	51	-
2016	9,629,934	77,688,075	31,311,881	47,222,098	100	48	-
2017	9,683,095	80,882,353	32,338,586	49,467,525	100	49	-
2018	**10,057,427**	**82,968,465**	**33,993,438**	**51,730,890**	**100**	**50**	**-**

** Five-year prospective smoothing began in FY09 for investment gains and losses.*

OTHER INFORMATION

Schedule of Contributions from Employers and Other Contributing Entities[1] ($ thousands)

Year Ended June 30	State Contributions[2]	Federal and Employer Contributions[2]	Total	Actuarially Determined Contribution[3]	Percentage Contributed	Annual Required Contribution per State Statute	Percentage Contributed
2009	$1,449,889	$151,716	$1,601,605	$2,109,480	75.9%	$1,556,737	102.9%
2010	2,079,129	170,653	2,249,782	2,481,914	90.6	2,217,053	101.5
2011	2,169,518	154,150	2,323,668	2,743,221	84.7	2,293,321	101.3
2012	2,405,172	153,409	2,558,581	3,429,945	74.6	2,547,803	100.4
2013	2,702,278	155,787	2,858,065	3,582,033	79.8	2,843,463	100.5
2014	3,437,478	157,228	3,594,706	4,091,978	87.8	3,592,578	100.1
2015	3,376,878	144,780	3,521,658	4,119,526	85.5	3,497,366	100.7
2016	3,741,802	147,408	3,889,210	4,582,530	84.9	3,883,544	100.1
2017	3,985,783	148,749	4,134,532	6,248,879	66.2	4,124,119	100.3
2018	**4,094,616**	**84,034**	**4,178,650**	**7,080,756**	**59.0**	**4,183,040**	**99.9**

1. *Actual contributions varied slightly from contributions that are required by statute mainly because of differences between estimated and actual federal contributions.*
2. *Excludes minimum retirement contributions. Employer Early Retirement Option (ERO) Program contributions were included through FY16 because the costs of the ERO program were included in the actuarial accrued liability. In all years, employer contributions for excess salary increases are included and contributions on salaries in excess of the governor's statutory salary are included by FY18. However, employer contributions for excess sick leave are not included because there is no assumption for excess sick leave and it is not included in the funding requirements. The FY15 state contribution reflects a $35 million reduction in the originally-certified state contribution under Public Act 98-0674, which increased federal contributions and reduced state contributions. The FY18 state contribution is the recertified amount reflecting Public Acts 100-0023 and 100-0340.*
3. *Actuarially determined contribution (ADC) through FY16 was based on GASB Statement No. 25. Beginning in FY17, the ADC is based on the TRS board's funding policy.*

The previous Schedule of Contributions from Employers and Other Contributing Entities is similar to the Schedule of the Employers' Contributions shown in the Required Supplementary Information in the Financial Section. Through FY16, both tables are based on an Actuarially Determined Contribution (ADC). Until FY17, the ADC includes the employer's normal cost and amortizes the System's unfunded liability over a 30-year open period, with the amortization component based on a level percent of pay pursuant to GASB Statement No. 25. Beginning in FY17, a different comparison is used due to the board's adoption of a more stringent actuarial funding calculation for its alternative certification. The board's funding policy was described earlier in this section under "Actuarial Standards and Illinois State Pension Funding."

The schedule of Retirees and Beneficiaries Added and Removed from the Rolls shows the overall trends in the number of benefit recipients and the amounts they receive.

Retirees and Beneficiaries Added to and Removed from Rolls

Year Ended June 30	Number at Beginning of Year	Number Added to Rolls	Number Removed from Rolls	Number at End of Year	End-of-Year Annual Allowances Amount	End-of-Year Annual Allowances Increase	Average Annual Allowance Amount	Average Annual Allowance Increase
2009	91,462	5,520	2,558	94,424	$3,815,292,869	7.4%	$40,406	4.1%
2010	94,424	5,711	2,381	97,754	4,109,018,971	7.7	42,034	4.0
2011	97,754	6,377	2,843	101,288	4,418,500,521	7.5	43,623	3.8
2012	101,288	6,943	2,784	105,447	4,781,692,373	8.2	45,347	4.0
2013	105,447	6,404	3,068	108,783	5,100,219,925	6.7	46,884	3.4
2014	108,783	6,433	2,883	112,333	5,430,104,782	6.5	48,339	3.1
2015	112,333	5,789	3,200	114,922	5,718,110,055	5.3	49,756	2.9
2016	114,922	5,723	2,995	117,650	6,024,825,507	5.4	51,210	2.9
2017	117,650	5,627	3,126	120,151	6,328,506,420	5.0	52,671	2.9
2018	**120,151**	**5,672**	**3,400**	**122,423**	**6,629,605,138**	**4.8%**	**54,153**	**2.8**

Source: TRS

Year Ended June 30	Amount Added to Rolls: Annual Benefit Increases	Amount Added to Rolls: New Benefit Recipients	Amount Removed from Rolls
2009	$108,144,294	$219,175,023	$63,144,284
2010	114,879,927	247,234,501	68,388,326
2011	125,124,423	263,213,399	78,856,272
2012	135,604,876	311,161,467	83,574,491
2013	145,282,975	268,124,075	94,879,498
2014	153,329,242	273,690,582	97,134,967
2015	162,158,193	237,388,307	111,541,227
2016	168,459,973	250,009,083	111,753,604
2017	180,258,847	242,035,397	118,613,331
2018	**187,737,960**	**249,984,285**	**136,623,527**

Source: TRS

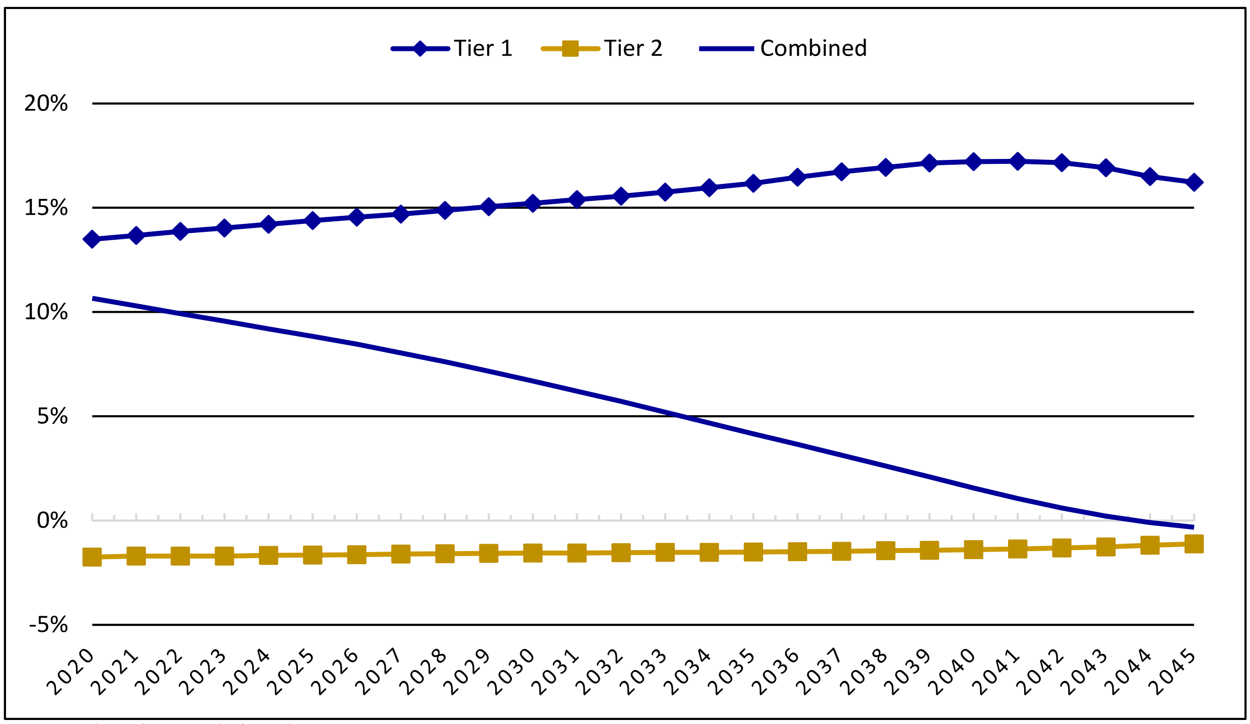
FUNDING ANALYSIS BY TIER

Public Act 96-0889 established a new tier of benefits for teachers who first contributed to TRS or another reciprocal pension system on or after Jan. 1, 2011. Tier 2 teachers have later retirement dates, longer vesting requirements, salary caps for pensions lower than the Social Security wage base and lower cost of living increases after retirement that are not compounded. On July 1, 2016, the member contribution rate for both tiers decreased from 9.4 percent to 9.0 percent.

The employer normal cost rate measures the employer's cost of the benefits being earned by active teachers during the year. It does not include any contributions towards the unfunded liability. The chart below shows that while the combined employer normal cost of both tiers in 2020 is over 10 percent of pay, the cost of Tier 2 is negative and stays negative through 2045.

As more Tier 2 members enter TRS, the combined employer normal cost continues to fall. By 2044, the combined employer normal cost is negative. In the meantime, the cost of Tier 1, which is a closed group, continues to increase as Tier 1 members age and accrue more service. The increases in employer normal cost for both tiers is a function of the projected unit credit actuarial cost method required by the Illinois Pension Code.

Employer Normal Cost by Tier

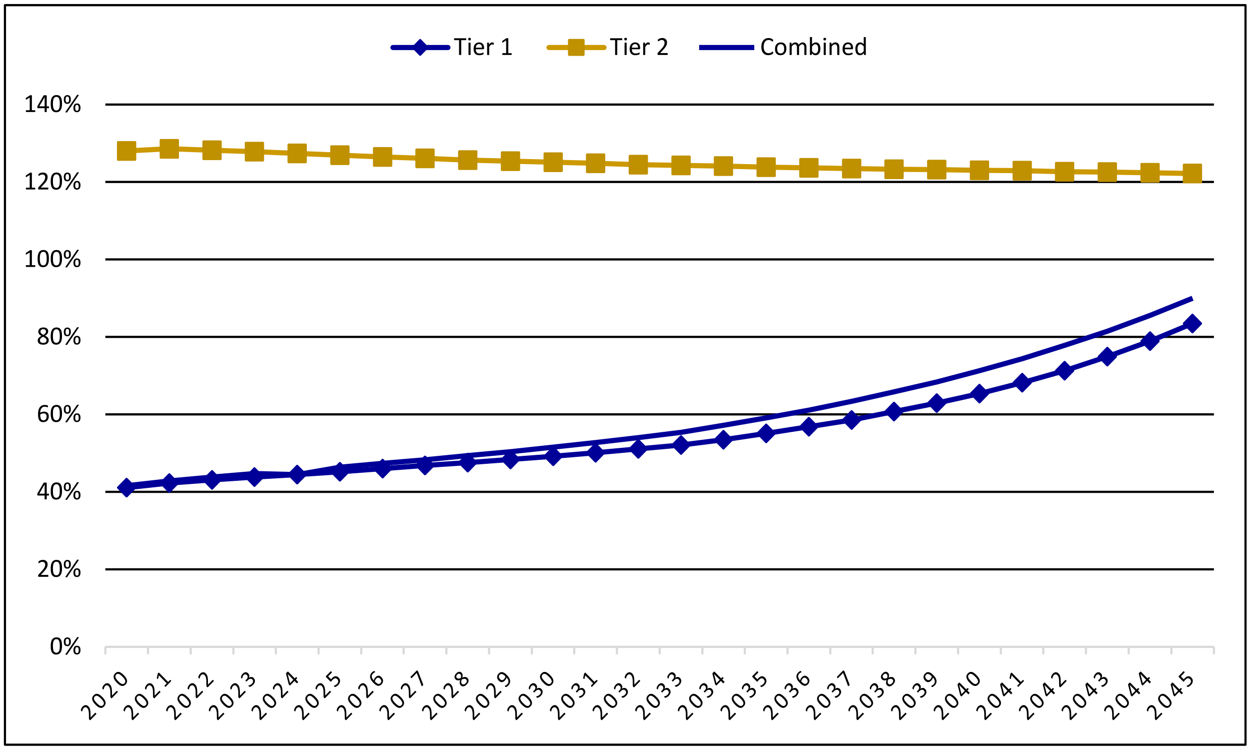


Note: Combined rate includes administrative expenses.

Under the 50-year funding plan, TRS will attain a funded ratio of 90 percent by 2045. The following chart illustrates how the tiers would be funded if they were operated as separate retirement plans. Tier 2 would be overfunded because member contributions are higher than the cost of Tier 2 benefits. The surplus Tier 2 assets lower the employer/state contributions required for Tier 1. Tier 2 active members are projected to outnumber Tier 1 active members by 2025.

By 2045, Tier 1 would be 84 percent funded and Tier 2 would be 122 percent funded, with the combined plan attaining the 90 percent target funded ratio. In practice, the two tiers are combined for administrative and funding purposes and their assets are commingled.

Funded Ratio by Tier



Average Annual Salary for Active Members (Excluding Substitutes) by Years of Service and Number of Employers

Years of Service		2018	2017	2016	2015
Under 5	Members	**25,959**	**26,486**	**26,767**	**26,698**
	Salary	$50,568	$49,935	$49,464	$47,796
5-9	Members	**25,831**	**26,436**	**27,845**	**29,798**
	Salary	$59,615	$59,150	$59,276	$58,935
10-14	Members	**29,465**	**29,617**	**29,395**	**29,214**
	Salary	$72,008	$71,412	$71,140	$70,589
15-19	Members	**24,304**	**23,936**	**22,894**	**21,421**
	Salary	$84,065	$82,745	$81,868	$80,737
20-24	Members	**15,590**	**14,728**	**14,120**	**13,877**
	Salary	$93,379	$92,035	$90,942	$89,591
25-29	Members	**8,786**	**8,254**	**8,087**	**7,908**
	Salary	$99,102	$97,624	$96,157	$94,510
30-34	Members	**3,976**	**3,979**	**3,936**	**3,970**
	Salary	$105,266	$104,652	$102,896	$100,785
35 +	Members	**379**	**453**	**592**	**731**
	Salary	$111,104	$110,576	$107,826	$105,372
	Total Members	**134,290**	**133,889**	**133,636**	**133,617**
	Salary	$73,028	$71,773	$70,868	$69,538
	% Change salary	**1.7%**	**1.3%**	**1.9%**	**1.4%**
	Total payroll full & part-time	**$9,806,930,120**	**$9,609,615,197**	**$9,470,516,048**	**$9,291,458,946**
	Number of Employers	**990**	**989**	**992**	**1,006**

Source: TRS

Annual salaries are computed using full- and part-time salary rates only; substitute and hourly employee salaries are omitted. Total payroll shown will be lower than payroll figures used elsewhere in this report.

2014	2013	2012	2011	2010	2009
25,191	**24,812**	**25,733**	**27,960**	**33,487**	**37,293**
$46,845	$46,058	$46,222	$47,292	$46,324	$45,464
33,028	**34,682**	**35,071**	**34,626**	**34,529**	**33,494**
$58,540	$58,027	$57,741	$57,416	$57,105	$55,945
28,747	**28,503**	**28,105**	**26,865**	**25,051**	**23,133**
$70,233	$69,686	$68,751	$67,691	$66,788	$65,168
19,917	**19,406**	**18,610**	**17,935**	**17,790**	**17,417**
$79,921	$79,295	$78,328	$77,268	$76,001	$73,770
13,562	**12,280**	**11,834**	**11,682**	**11,391**	**11,084**
$88,037	$86,235	$84,904	$83,563	$82,184	$79,805
7,827	**7,913**	**7,940**	**7,834**	**7,786**	**7,790**
$93,016	$91,735	$89,986	$88,416	$86,566	$84,282
3,941	**4,247**	**4,826**	**5,839**	**6,554**	**6,858**
$98,807	$96,966	$94,665	$93,299	$91,077	$87,973
809	**889**	**994**	**1,179**	**1,251**	**1,265**
$103,533	$101,293	$98,140	$98,678	$95,486	$90,698
133,022	**132,732**	**133,113**	**133,920**	**137,839**	**138,334**
$68,556	$67,558	$66,696	$66,044	$64,385	$62,319
1.5%	**1.3%**	**1.0%**	**2.6%**	**3.3%**	**3.4%**
$9,119,456,232	**$8,967,108,456**	**$8,878,104,648**	**$8,844,612,480**	**$8,874,727,268**	**$8,620,836,546**
1,013	**1,019**	**1,024**	**1,029**	**1,030**	**1,030**

Average Annual Salary and Age for Active Members by Years of Service as of June 30, 2018

Age		Subs	Years of Service: Under 5	5-9	10-14	15-19
20-24	**Members**	**1,877**	**3,085**	-	-	-
	Salary	$5,182	$43,402	-	-	-
25-29	**Members**	**2,788**	**10,082**	**4,300**	-	-
	Salary	$5,576	$48,708	$54,743	-	-
30-34	**Members**	**2,206**	**4,779**	**10,555**	**4,749**	-
	Salary	$5,581	$52,344	$59,425	$68,471	-
35-39	**Members**	**2,636**	**2,829**	**4,367**	**12,076**	**4,187**
	Salary	$5,240	$54,577	$61,687	$72,368	$81,813
40-44	**Members**	**3,162**	**2,104**	**2,458**	**4,708**	**9,777**
	Salary	$5,788	$53,650	$61,191	$74,143	$85,205
45-49	**Members**	**3,642**	**1,447**	**1,865**	**3,282**	**4,364**
	Salary	$5,686	$56,142	$61,962	$72,919	$85,182
50-54	**Members**	**2,939**	**846**	**1,234**	**2,222**	**2,583**
	Salary	$5,599	$54,415	$61,373	$70,691	$83,562
55-59	**Members**	**2,823**	**496**	**697**	**1,623**	**2,125**
	Salary	$5,884	$57,888	$62,869	$71,808	$81,528
60-64	**Members**	**2,234**	**218**	**293**	**665**	**1,013**
	Salary	$5,670	$56,920	$62,948	$74,630	$83,075
65-69	**Members**	**1,448**	**58**	**56**	**120**	**225**
	Salary	$5,364	$56,446	$64,025	$79,358	$88,047
70-74	**Members**	**616**	**15**	**5**	**18**	**27**
	Salary	$5,629	$64,865	$59,226	$75,450	$92,487
Over 74	**Members**	**198**	-	**1**	**2**	**3**
	Salary	$5,609	-	$39,937	$58,500	$79,217
	Total Members	**26,569**	**25,959**	**25,831**	**29,465**	**24,304**
	Salary	$5,590	$50,658	$59,615	$72,008	$84,065

Source: TRS

	Average Age	Average Years of Service	Members
Full and part-time members	42	13	134,290
Substitutes	46	4	26,569
All	43	11	160,859

Years of Service							
20-24	25-29	30-34	35-39	40-44	45-49	50+	Full & Part-time Member Totals
-	**-**	**-**	**-**	**-**	**-**	**-**	**3,085**
-	-	-	-	-	-	-	$43,402
-	**-**	**-**	**-**	**-**	**-**	**-**	**14,382**
-	-	-	-	-	-	-	$50,512
-	**-**	**-**	**-**	**-**	**-**	**-**	**20,083**
-	-	-	-	-	-	-	$59,879
-	**-**	**-**	**-**	**-**	**-**	**-**	**23,459**
-	-	-	-	-	-	-	$69,920
2,699	**-**	**-**	**-**	**-**	**-**	**-**	**21,746**
$92,443	-	-	-	-	-	-	$77,941
7,114	**2,013**	**-**	**-**	**-**	**-**	**-**	**20,085**
$94,451	$97,856	-	-	-	-	-	$83,483
2,973	**4,286**	**1,482**	**-**	**-**	**-**	**-**	**15,626**
$93,875	$99,533	$105,046	-	-	-	-	$86,782
1,854	**1,815**	**2,160**	**109**	**-**	**-**	**-**	**10,879**
$90,407	$99,788	$105,747	$110,556	-	-	-	$87,463
757	**536**	**270**	**143**	**39**	**-**	**-**	**3,934**
$92,510	$98,549	$103,481	$108,170	$115,930	-	-	$85,261
172	**120**	**53**	**22**	**34**	**-**	**-**	**873**
$91,614	$98,525	$100,667	$117,287	$120,687	-	-	$88,346
21	**14**	**11**	**8**	**1**	**5**	**1**	**126**
$88,645	$86,128	$106,458	$103,995	$102,248	$117,072	$131,155	$87,408
-	**2**	**-**	**1**	**-**	**1**	**2**	**12**
-	$79,720	-	$65,374	-	$131,448	$101,636	$79,510
15,590	**8,786**	**3,976**	**283**	**74**	**19**	**3**	**134,290**
$93,379	$99,102	$105,266	$109,529	$117,931	$107,906	$111,476	$73,028

PLAN SUMMARY

ADMINISTRATION

TRS was created and is governed by Article 16 of the Illinois Pension Code, contained in the Illinois Compiled Statutes (ILCS). A 13-member board of trustees is authorized to carry out duties granted to it under the article.

MEMBERSHIP

Membership in TRS is mandatory for all full-time, part-time and substitute school personnel employed in Illinois outside the city of Chicago in positions requiring licensure. Persons employed at certain state agencies are also members.

BENEFITS

Public Act 96-0889 established a second, lower tier of benefits for teachers who first contributed to TRS or one of the Illinois reciprocal retirement systems on or after Jan. 1, 2011. Tier 1 benefits were not affected by PA 96-0889. See the table on the following pages for a summary of Tier 1 and Tier 2 benefits.

See the Financial Section for a discussion of benefit programs recently enacted by the legislature but not yet in effect. The accelerated benefit programs and optional defined contribution plan are discussed under "Legislative." Tier 3 is discussed in the Notes to the Financial Section under "A. Plan Description, 5. Benefits Provisions."

OTHER PROVISIONS

EMPLOYMENT-RELATED FELONY CONVICTION

Any member convicted of a felony related to or in connection with teaching is not eligible for TRS benefits. However, the member may receive a refund of contributions.

CONTINUITY OF CREDIT WITHIN ILLINOIS

TRS is one of 13 public retirement systems that are included in the provisions of the Illinois Reciprocal Act. This act ensures continuous pension credit for public employment in Illinois.

CONFLICTS

Conditions involving a claim for benefits may require further clarification. If conflicts arise between the material in this summary and that of the law, the law takes precedence.

SPORTS & RECREATION

1876 – The National League of Baseball was founded and the Chicago White Stockings (now the Chicago Cubs) won the league's first championship.

1887 – "Softball" was invented in Chicago.

1893 – The country's first 18-hole golf course, the Chicago Golf Club, was opened in Wheaton.

1906 – The Chicago White Sox won the World Series (and again in 1917 and 2005).

1907 – The Chicago Cubs won the World Series (and again in 1908 and 2016).

1914 – The University of Illinois won the national collegiate football championship (and again in 1919, 1923, 1927 and 1951).

1919 – The Chicago White Sox are stripped of the World Series title because players gambled.

1921 – The Chicago Staleys (Chicago Bears) won the national professional football championship (and would again in 1932, 1933, 1940, 1941, 1943, 1946,1963 and 1986).

1933 – The first Major League Baseball All-Star Game was held in Chicago.

1934 – The Chicago Black Hawks won the Stanley Cup (and would again in 1938, 1961, 2010, 2013 and 2015).

1935 – Jay Berwanger of the University of Chicago is awarded college football's first Heisman Trophy.

1943 – The All-American Girls Professional Baseball League began play for 11 seasons; the Rockford Peaches won a record four championships.

1947 – The Chicago Cardinals won the National Football League championship.

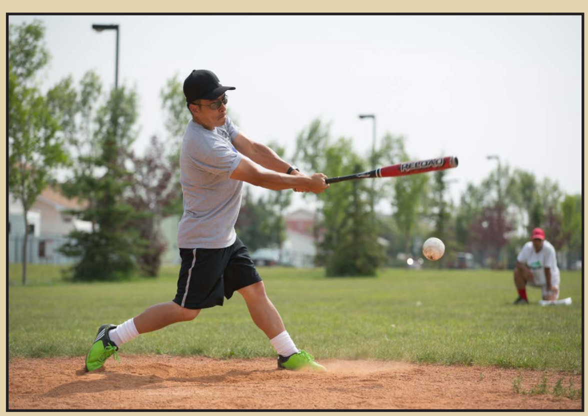
1963 – Loyola University of Chicago won the NCAA national basketball championship.

1981 – The Chicago Sting won the North American Soccer League Championship (and would again in 1984).

1991 – The Chicago Bulls won the National Basketball Association Championship (and would again in 1992, 1993, 1996, 1997 and 1998).

1998 – The Chicago Fire won the Major League Soccer Cup.

2001 – Chicago International Speedway in Joliet is opened.



SUMMARY OF TIER 1 AND TIER 2 BENEFIT PROVISIONS

	Tier 1
Tier 1 Defined	Members who first contributed to TRS or one of the other Illinois reciprocal retirement systems before Jan. 1, 2011 are covered by Tier 1. Tier 1 membership is retained even if a member takes a refund and does not repay it.
Retirement Eligibility (Vesting)	Tier 1 members who meet the following age and service requirements are eligible to retire: • Age 55 with 20 years of service (reduced 6% for every year that the member's age at retirement is under 60) • Age 55 with 35 years of service (no reduction) • Age 60 and 10 years of service (no reduction) • Age 62 with 5 years of service (no reduction) A member with fewer than five years of service can receive a single sum retirement benefit at age 65.
Retirement Formula	Retirement benefits for most Tier 1 members are based on a formula of 2.2% times years of creditable service times final average salary. The maximum benefit is 75% of final average salary. Some Tier 1 members with service before July 1, 1998 will have benefits based on the graduated formula that was in effect before that date. The maximum benefit is also 75% under the graduated formula. Public Act 90-0582 changed the benefit accrual rate beginning July 1, 1998. Members could upgrade their service under the graduated formula by making a contribution to TRS. The law provides that each three full years worked after the effective date reduces the number of years to be upgraded by one. Subsequently, Public Act 91-0017 reduced the 2.2 formula upgrade cost for members with more than 34 years of service. The final average salary is based on the member's highest four consecutive years of service out of the last 10. Tier 1 members hired before July 1, 2005 may receive a money-purchase style "actuarial" benefit. By law, the higher of the formula benefit or the actuarial benefit is paid.
Post-Retirement Increases	Annual increases are 3% of the current retiree benefit. The first increase is the later of the Jan. 1 following attainment of age 61 or the first anniversary of retirement.
Disability Benefits	Nonoccupational disability benefits are payable as disability benefits or disability retirement benefits to members who have a minimum of three years of creditable service. No minimum service requirement applies to occupational benefits for duty-related accidents or illnesses. Members continue to accrue service credit while they are receiving disability benefits but not while receiving disability retirement benefits. Generally, nonoccupational disability benefits are 40% of pay; occupational disability benefits are 60% of pay, reduced by payments received under workers' compensation and disability retirement benefits are 35% of pay annually or a higher amount based on service credit and age. On the Jan. 1 following the fourth anniversary of the granting of the disability benefit, the monthly benefit is increased by 7%. Thereafter, the benefit increases by 3% of the current benefit. Public Act 94-0539 allows individuals who have received disability benefits for at least one year to return to teaching on a limited basis if their conditions improve. Disability benefits can continue so long as the combined earnings from teaching and disability benefits do not exceed 100% of the salary rate upon which the disability is based.
Survivor Benefits	In most cases, survivor benefits for Tier 1 members' dependent beneficiaries are 50% of the retired member's benefit. The annual increase is 3% of the current survivor benefit. A dependent beneficiary can elect a lump sum payment instead of a monthly annuity. Nondependent beneficiaries are only eligible for lump sum payments. Refunds of member contributions not already received in retirement benefits are also payable as death benefits.
Post-Retirement Employment	Until June 30, 2020, Tier 1 retirees can teach up to 120 days or 600 hours per year without having their retirement benefits suspended. After that date, the limits return to 100 days or 500 hours.
Contributions to TRS	During FY18, Tier 1 members contributed 9.0% of pay. Of this rate, 7.5% is for retirement benefits, 1.0% is for survivor benefits and 0.5% is for the annual increase. TRS members do not contribute to Social Security or Medicare for TRS-covered employment. However, members who were hired or changed employers after March 31, 1986 and who elected to participate in Medicare during a 2004 referendum, do contribute to Medicare.
Contributions for Retiree Health Insurance	During FY18, members contributed 1.18% of pay to the Teachers' Health Insurance Security Fund.
Refunds	After a four-month waiting period from the date last taught, a member ceasing TRS-covered employment may withdraw all contributions except for the 1% survivor benefit contribution. Credit can be re-established if the member returns to a TRS-covered position for one year or to a reciprocal system for two years and repays the refund with interest. A member receiving disability benefits is not eligible for a refund.
Service Credit	A member is granted a maximum of one year of service credit for 170 paid days per school year, defined by statute as July 1 through June 30. Optional service credit is available for periods of public school teaching in other states or under the authority of the United States government; substitute or part-time teaching prior to July 1, 1990; leaves of absence or involuntary layoff; military service; and gaps in teaching due to pregnancy or adoption prior to July 1, 1983. Up to two years of unused, uncompensated sick leave that has been certified by former employers may also be added to service credit at retirement.
Accelerated Benefit Programs (temporary)	Until June 30, 2021, inactive members with five years of TRS service can take a lump-sum payment of 60 percent of the present value of their future benefit payments. Until June 30, 2021, retiring members can elect to receive 70 percent of the present value of the difference between the current 3 percent compounded annual increase that starts no earlier than age 61 and a 1.5 percent noncompounded annual increase that starts no earlier than age 67.

	Tier 2
Tier 2 Defined	Members who first contributed to TRS on or after Jan. 1, 2011 and do not have any previous service with one of the other Illinois reciprocal retirement systems are covered by Tier 2.
Retirement Eligibility (vesting)	Tier 2 members who meet the following age and service requirements are eligible to retire: • Age 67 with 10 years of service (no reduction) • Age 62 with 10 years of service (reduced 6% for every year the member's age at retirement is under age 67) A member with fewer than five years of service can receive a single sum retirement benefit at age 65.
Retirement Formula	Retirement benefits for Tier 2 members are based on a formula of 2.2% times years of creditable service times final average salary. The maximum benefit is 75% of final average salary. Tier 2 creditable earnings for pension purposes are limited by an amount that is tied to the 2010 Social Security Wage Base (SSWB). The Tier 2 limit increases by 3% or half the increase in the Consumer Price Index, whichever is less. The FY18 Tier 2 limit was $113,644.91. The final average salary is based on the member's highest eight consecutive years of service out of the last 10. Tier 2 does not provide a money-purchase style "actuarial" benefit.
Post-Retirement Increases	Annual increases will be the lesser of 3% or one-half of the increase in the Consumer Price Index times the original retiree benefit. The first increase is the later of the Jan. 1 following attainment of age 67 or the first anniversary of retirement.
Disability Benefits	Same as Tier 1, including increases.
Survivor Benefits	In most cases, survivor benefits for Tier 2 members' dependent beneficiaries will be 66 2/3% of the retired member's benefit. The annual increase is the lesser of 3% or one-half of the increase in the Consumer Price Index times the original survivor benefit. A dependent beneficiary can elect a lump sum payment instead of a monthly annuity. Nondependent beneficiaries are only eligible for lump sum payments. Refunds of member contributions not already received in retirement benefits are also payable as death benefits.
Post-Retirement Employment	The law suspends a Tier 2 member's retirement benefits if the member accepts full-time employment in a position covered by one of the Illinois reciprocal retirement systems.
Contributions to TRS	During FY18, Tier 2 members also contributed 9.0% of pay, with components designated for the same purposes. Tier 2 members do not contribute to Social Security for their TRS-covered employment but do contribute to Medicare.
Contributions for Retiree Health Insurance	Same as Tier 1.
Refunds	Same as Tier 1.
Service Credit	Same as Tier 1. The purchase of optional service earned before Jan. 1, 2011 does not change a Tier 2 member's status to Tier 1.
Accelerated Benefit Program (temporary)	Until June 30, 2021, inactive members with 10 years of TRS service can take a lump-sum payment of 60 percent of the present value of their future benefit payments.

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STATISTICAL

CONFLICT, JUSTICE & CRIME

1830 – The first state prison was built in Alton.

1832 – The Black Hawk War ended.

1837 – A pro-slavery mob murdered abolitionist newspaper editor Elijah P. Lovejoy in Alton.

1844 – Joseph Smith, founder of the church of Jesus Christ of Latter day Saints and his brother Hyrum were murdered in Carthage.

1861 – The Civil War began. More than 256,000 Illinoisans serve in the conflict; approximately 30,000 lost their lives – 10,000 in combat and 20,000 from disease.

1865 – Abraham Lincoln was assassinated in Washington, D.C. and was buried in Springfield.

1871 – The Great Chicago Fire killed 300, destroyed 18,000 buildings and accounted for $200 million in economic losses.

1915 – The excursion ship Eastland capsized in the Chicago River, killing 1,812.

1917 – The United States entered World War 1. One out of every 12 soldiers serving was from Illinois, or 351,153. By the end of the war, more than 5,000 Illinoisans had lost their lives.

1929 – Seven were murdered during the “St, Valentine’s Day Massacre” in Chicago.

1941 – The United States entered World War 2. A total of 957,854 men and women served during the conflict, or one out of every 16 Americans. More than 17,500 Illinoisans lost their lives.

1950 – The Korean War began. Of the Illinoisans who served in the conflict, 1,789 lost their lives.

1956 – State Auditor Orville Hodge was convicted of stealing $1.5 million in state funds.

1961 – The United States began to escalate its involvement in the Vietnam War, which lasted until 1972. Of the Illinoisans who served in the conflict, 2,970 lost their lives.

1973 – Former Governor Otto Kerner was convicted of bribery while in office.

1990 – The United States led an international military coalition that forced Iraq to leave the neighboring country of Kuwait. 160 Illinoisans lost their lives.

2000 – A moratorium on the use of the state’s capital punishment law was imposed by Gov. George H. Ryan.

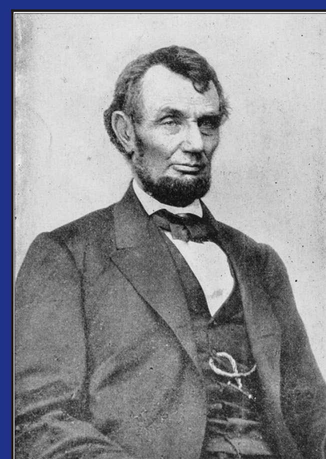
2001 – Following the Sept. 11 terrorist attacks, the United States launched a military mission in Afghanistan and Iraq to contain the terrorist threat. Seventy Illinois military personnel lost their lives.

2006 – Former Governor George H. Ryan was convicted of corruption-related charges while he served as secretary of state.

2011 – Former Governor Rod Blagojevich was convicted of corruption while in office.

Fort Sheridan Cemetery in Lake County is the final resting place for 2,000 service members.

In 1865, President Lincoln was assassinated and later buried in Springfield.



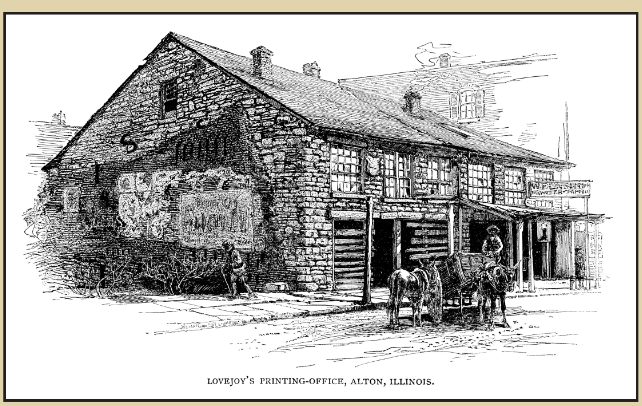


Illustration of Elijah Lovejoy's printing office in Alton.

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STATISTICAL SECTION

The tables in this section present detailed information on benefit payments and recipients, member and employer contributions, employer contribution rates and the largest TRS employers.

SECTION CONTENTS

10-YEAR FINANCIAL TRENDS – PAGES 114-115

These two schedules contain information that allows the reader to view the change in net position and benefit and refund deductions from net position over a 10-year period. Both schedules help the reader understand the financial changes that have occurred over time.

EMPLOYEE AND EMPLOYER CONTRIBUTION RATES – PAGE 116

This schedule offers information on the contribution rates for employees, the state and employers to the System over a 10-year period.

ACTIVE MEMBERS BY TIER – PAGE 116

This schedule shows the number of members by tier since Tier 2 began in FY11.

RETIRED MEMBERS BY YEARS OF SERVICE AND YEARS IN RETIREMENT – PAGE 117

This schedule shows the number of retirees by their years of service and years in retirement in five-year increments. It also shows their average current monthly benefits and average benefits when they first retired. A column on the right shows the average age of retirees in each “years retired” increment.

DEMOGRAPHICS OF BENEFIT RECIPIENTS AND ACTIVE MEMBERS – PAGE 118-119

These schedules help the reader understand characteristics of the specific groups of benefit recipients and active members of the TRS.

AVERAGE BENEFIT PAYMENTS TO CURRENT RECIPIENTS – PAGE 120

This schedule shows the average retirement, disability and survivor benefits by benefit range. It also breaks down the retirement and disability benefits by type.

AVERAGE BENEFIT PAYMENTS TO NEW RETIREES – PAGE 121

This schedule contains information regarding the average benefits paid to new retirees over a 10-year period. The schedule also allows the reader to view those payments by increments of years of service.

PARTICIPATING EMPLOYERS – PAGE 122

This schedule allows the reader to view the 10 largest participating employers of TRS. The reader can also view the percentages of total membership covered by the largest employers in the current year and nine years ago.

Changes in Net Position Restricted for Pensions, Last 10 Fiscal Years ($ thousands)

	2018	2017	2016	2015
Additions				
Member contributions*	$938,037	$929,130	$951,809	$935,451
State of Illinois	4,095,125	3,986,364	3,742,469	3,377,665
Employer contributions**	84,633	149,495	148,041	145,591
Investment income (loss) net of expenses	4,049,272	5,520,453	(44,103)	1,770,550
Total additions to/reductions from plan net position	9,167,067	10,585,442	4,798,216	6,229,257
Deductions				
Benefit payments	6,458,710	6,152,868	5,848,180	5,536,399
Refunds	92,925	285,138	83,027	88,638
Administrative expenses	21,550	22,729	22,968	21,687
Total deductions from plan net position	6,573,185	6,460,735	5,954,175	5,646,724
Changes in net position restricted for pensions				
Beginning of year	49,375,665	45,250,957	46,406,916	45,824,382
Net increase (decrease)	2,593,882	4,124,708	(1,155,959)	582,534
End of year	**$51,969,547**	**$49,375,665**	**$45,250,957**	**$46,406,916**

** Member contributions include contributions for purchases of optional service, early retirement and upgrades to the 2.2 formula.*
*** Employer contributions include contributions from federal funds and for early retirement, the 2.2 formula, salary increases in excess of 6 percent used in final average salary calculations and excess sick leave used for service credit. Beginning in 2018, contributions on earnings exceeding the governor's statutory salary are also included.*

Benefit and Refund Deductions from Net Position by Type, Last 10 Fiscal Years ($ thousands)

	2018	2017	2016	2015
Type of benefit				
Retirement	$6,140,877	$5,857,968	$5,575,130	$5,281,221
Survivor	285,068	263,430	242,578	224,779
Disability	32,765	31,470	30,472	30,399
Total benefits	**$6,458,710**	**$6,152,868**	**$5,848,180**	**$5,536,399**
Type of refund				
Withdrawals	27,356	30,487	26,797	29,789
Death benefits and excess contribution refunds paid to survivors	20,263	19,135	17,094	17,881
2.2 and optional service	13,247	14,185	15,074	17,855
Survivor contributions refunded to retirees	8,839	9,410	10,458	10,197
Early Retirement Option and other	23,220	211,921	13,604	12,916
Total refunds	**$92,925**	**$285,138**	**$83,027**	**$88,638**

2014	2013	2012	2011	2010	2009
$928,746	$921,423	$917,661	$909,577	$899,401	$876,182
3,438,383	2,703,312	2,406,364	2,170,918	2,080,729	1,451,592
158,335	157,179	154,895	155,111	171,421	152,329
6,782,031	4,561,768	224,107	7,234,539	3,679,643	(8,688,286)
11,307,495	8,343,682	3,703,027	10,470,145	6,831,194	(6,208,183)
5,225,207	4,893,084	4,553,822	4,228,283	3,927,838	3,653,714
95,456	88,398	84,635	76,587	60,350	53,709
21,218	20,257	19,012	17,792	16,951	17,388
5,341,881	5,001,739	4,657,469	4,322,662	4,005,139	3,724,811
39,858,768	36,516,825	37,471,267	31,323,784	28,497,729	38,430,723
5,965,614	3,341,943	(954,442)	6,147,483	2,826,055	(9,932,994)
$45,824,382	**$39,858,768**	**$36,516,825**	**$37,471,267**	**$31,323,784**	**$28,497,729**

2014	2013	2012	2011	2010	2009
$4,986,156	$4,670,385	$4,347,173	$4,036,147	$3,749,666	$3,486,697
208,424	192,390	177,422	163,910	151,074	140,695
30,627	30,309	29,227	28,226	27,098	26,322
$5,225,207	**$4,893,084**	**$4,553,822**	**$4,228,283**	**$3,927,838**	**$3,653,714**
33,128	30,194	25,563	22,528	17,149	17,357
20,633	16,764	18,415	16,404	15,161	15,076
19,331	20,053	20,988	19,861	15,050	11,013
10,990	10,780	10,358	10,252	7,967	6,916
11,374	10,607	9,311	7,542	5,023	3,347
$95,456	**$88,398**	**$84,635**	**$76,587**	**$60,350**	**$53,709**

Employee and Employer Contribution Rates, Last 10 Fiscal Years

Fiscal Year	Employee Rate (%)[2]	Employer Rate (%)[1] State[3]	School Districts for 2.2 Formula	School Districts from Federal Sources[4]	Total[5]
2009	9.40%	16.44%	0.58%	0.63%	17.66%
2010	9.40	22.56	0.58	0.82	23.96
2011	9.40	22.38	0.58	0.72	23.68
2012	9.40	24.06	0.58	0.85	25.49
2013	9.40	27.21	0.58	0.84	28.63
2014	9.40	34.44	0.58	0.97	35.99
2015	9.40	32.42	0.58	0.58	33.58
2016	9.40	35.30	0.58	0.76	36.64
2017	9.00	37.81	0.58	0.73	39.12
2018	**9.00**	**39.22**	**0.58**	**0.20**	**40.02**

1. *Employer contributions exclude lump-sum contributions for the Early Retirement Option (ERO).*
2. *Employee rate decreased to 9.00 percent in FY17 because the ERO program was discontinued.*
3. *FY08 through FY10 rates are based on statutory ramp schedule. FY11 rate is based on recertification requirements of Pubic Act 96-1511. FY12 – FY16 were based on the statutory formula. The FY15 total employer rate is the same as originally certified by the TRS Board of Trustees but the state component is lower and the federal component is higher than originally certified due to PA 98-0674. FY18 is based on the recertification requirement of PA 100-0023 and the change in federal contribution requirements in PA 100-0340.*
4. *Federal contributions above are expressed as percentages of total active member payroll. Through FY17, the employer contribution rate paid on behalf of members paid from federal sources is the same as the employer contribution rate paid by the State of Illinois on behalf of members not paid from federal sources: 13.11 percent in FY08, 17.08 percent in FY09, 23.38 percent in FY10, 23.10 percent in FY11, 24.91 percent in FY12, 28.05 percent in FY13, 35.41 percent in FY14, 33.00 percent in FY15, 36.06 percent in FY16 and 38.54 percent in FY17. Beginning in FY18, the federal contribution rate is the same as the total employer normal cost rate: 10.10 percent for 2018.*
5. *Totals shown are rates certified by the TRS Board of Trustees based on estimated payrolls and may not total due to rounding. Actual amounts collected do not equal amounts estimated by actuaries due to differences between estimated and actual payroll.*

Active Members by Tier

	Tier 1		Tier 2		Total - Both Tiers	
Fiscal Year	Number	% of Total	Number	% of Total	Number	% of Total
2011	164,030	98.8%	1,983	1.2%	166,013	100.0%
2012	150,996	93.1	11,221	6.9	162,217	100.0
2013	144,297	89.8	16,395	10.2	160,692	100.0
2014	138,260	86.5	21,578	13.5	159,838	100.0
2015	133,147	83.4	26,560	16.6	159,707	100.0
2016	128,107	80.2	31,628	19.8	159,735	100.0
2017	123,630	77.0	36,858	23.0	160,488	100.0
2018	**119,333**	**74.2**	**41,526**	**25.8**	**160,859**	**100.0**

Note: Tier 2 membership began Jan. 1, 2011.

Retired Members by Years of Service and Years in Retirement as of June 30, 2018*

Years Retired		Years of Service: Under 5	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50+	Weighted Average	Avg. Age
Under 1	**Retirees**	**154**	**268**	**337**	**423**	**585**	**575**	**632**	**855**	**64**	**9**	**-**	**$3,902**	**61**
	Avg. current benefit	$257	$735	$1,530	$2,560	$3,411	$4,638	$6,052	$6,954	$7,775	$9,596	-	$4,319	
	Avg. orig. benefit	$257	$735	$1,529	$2,558	$3,405	$4,632	$6,043	$6,954	$7,775	$9,596	-	$4,315	
1 – 4	**Retirees**	**882**	**1,463**	**1,564**	**1,848**	**2,733**	**2,473**	**2,876**	**3,595**	**368**	**60**	**9**	**17,871**	**64**
	Avg. current benefit	$293	$794	$1,557	$2,502	$3,534	$4,698	$5,962	$6,569	$7,519	$9,295	$11,829	$4,138	
	Avg. orig. benefit	$275	$740	$1,458	$2,356	$3,349	$4,456	$5,668	$6,351	$7,069	$8,725	$11,134	$3,944	
5 – 9	**Retirees**	**1,075**	**2,163**	**1,992**	**1,964**	**3,074**	**3,047**	**4,397**	**6,670**	**524**	**85**	**13**	**25,004**	**67**
	Avg. current benefit	$336	$849	$1,603	$2,632	$3,662	$4,954	$6,371	$7,002	$7,920	$8,880	$14,212	$4,668	
	Avg. orig. benefit	$277	$694	$1,319	$2,169	$3,043	$4,118	$5,275	$5,817	$6,580	$7,391	$11,858	$3,872	
10 –14	**Retirees**	**860**	**1,309**	**1,342**	**1,261**	**2,437**	**2,667**	**9,370**	**4,779**	**336**	**50**	**3**	**24,414**	**71**
	Avg. current benefit	$328	$806	$1,556	$2,597	$3,630	$5,036	$6,872	$7,477	$7,755	$8,338	$10,857	$5,413	
	Avg. orig. benefit	$232	$572	S1,103	$1,847	$2,579	$3,566	$4,846	$5,321	$5,484	$5,910	$7,769	$3,832	
15 – 19	**Retirees**	**783**	**796**	**743**	**697**	**1,696**	**2,031**	**7,768**	**3,368**	**210**	**29**	**4**	**18,125**	**75**
	Avg. current benefit	$340	$813	$1,450	$2,429	$3,448	$4,922	$6,800	$7,343	$7,084	$7,409	$7,068	$5,452	
	Avg. orig. benefit	$207	$496	$892	$1,497	$2,131	$3,042	$4,255	$4,533	$4,357	$4,556	$4,490	$3,390	
20 – 24	**Retirees**	**327**	**408**	**327**	**278**	**582**	**897**	**1,349**	**2,524**	**3,232**	**4**	**-**	**9,928**	**80**
	Avg. current benefit	$340	$790	$1,220	$1,834	$2,582	$3,407	$4,460	$5,712	$6,346	$7,324	-	$4,721	
	Avg. orig. benefit	$180	$414	$637	$966	$1,385	$1,800	$2,341	$2,944	$3,182	$3,891	-	$2,419	
25 –29	**Retirees**	**174**	**257**	**357**	**313**	**843**	**968**	**1,300**	**1,621**	**1,330**	**6**	**2**	**7,171**	**84**
	Avg. current benefit	$270	$680	$1,171	$1,705	$2,552	$3,346	$4,591	$5,665	$5,739	$5,492	$4,547	$4,098	
	Avg. orig. benefit	$124	$304	$527	$771	$1,154	$1,533	$2,113	$2,647	$2,772	$2,535	$2,074	$1,915	
30 – 34	**Retirees**	**52**	**85**	**165**	**206**	**585**	**512**	**624**	**444**	**13**	**1**	**-**	**2,687**	**90**
	Avg. current benefit	$259	$586	$1,034	$1,620	$2,216	$3,081	$4,431	$5,451	$4,841	$5,051	-	$3,236	
	Avg. orig. benefit	$101	$220	$399	$640	$880	$1,229	$1,777	$2,164	$1,946	$2,051	-	$1,289	
35 – 39	**Retirees**	**13**	**11**	**47**	**67**	**222**	**177**	**168**	**85**	**9**	**1**	**-**	**800**	**95**
	Avg. current benefit	$222	$450	$857	$1,179	$1,783	$2,381	$3,395	$4,097	$3,302	$2,578	-	$2,369	
	Avg. orig. benefit	$76	$114	$280	$394	$616	$830	$1,197	$1,449	$1,154	$849	-	$826	
40 – 44	**Retirees**	**1**	**2**	**8**	**10**	**41**	**22**	**17**	**26**	**2**	**-**	**-**	**129**	**99**
	Avg. current benefit	$217	$393	$699	$1,182	$1,286	$1,638	$2,177	$2,744	$3,116	-	-	$1,719	
	Avg. orig. benefit	$64	$57	$190	$331	$360	$480	$662	$834	$1,004	-	-	$506	
45 – 49	**Retirees**	**-**	**-**	**-**	**1**	**5**	**1**	**2**	**3**	**-**	**-**	**-**	**12**	**104**
	Avg. current benefit	-	-	-	$948	$1,281	$202	$1,687	$2,699	-	-	-	$1,586	
	Avg. orig. benefit	-	-	-	$97	$274	-	$434	$746	-	-	-	$381	
	Total retirees	**4,321**	**6,762**	**6,882**	**7,068**	**12,803**	**13,370**	**28,503**	**23,970**	**6,088**	**245**	**31**	**110,043**	
	Avg. current benefit	**$320**	**$806**	**$1,503**	**$2,449**	**$3,359**	**$4,573**	**$6,370**	**$6,807**	**$6,529**	**$8,573**	**$11,650**	**$4,776**	
	Avg. orig. benefit	**$238**	**$620**	**$1,169**	**$1,944**	**$2,565**	**$3,426**	**$4,526**	**$5,052**	**$3,829**	**$6,936**	**$9,670**	**$3,463**	

** Represents monthly benefit*

Demographics of Benefit Recipients and Active Members as of June 30, 2018 (excludes inactive members)

	Retirees			Disability Benefit Recipients			Survivors		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
Under 20	-	-	-	-	-	-	37	9	46
20-24	-	-	-	-	-	-	9	4	13
25-30	-	-	-	-	3	3	-	1	1
30-34	-	-	-	2	9	11	5	8	13
35-39	-	-	-	3	30	33	7	11	18
40-44	-	-	-	3	45	48	16	36	52
45-49	-	-	-	15	94	109	16	30	46
50-54	7	19	26	23	132	155	26	71	97
55-59	1,015	2,888	3,903	37	169	206	94	153	247
60-64	3,555	13,133	16,688	32	144	176	168	297	465
65-69	7,036	22,953	29,989	23	114	137	373	787	1,160
70-74	8,373	17,781	26,154	22	78	100	560	1,189	1,749
75-79	5,356	10,251	15,607	10	37	47	569	1,480	2,049
80-84	3,281	5,593	8,874	5	30	35	508	1,513	2,021
85-89	1,923	3,502	5,425	3	17	20	443	1,413	1,856
90+	867	2,510	3,377	1	6	7	362	1,098	1,460
Total:	**31,413**	**78,630**	**110,043**	**179**	**908**	**1,087**	**3,193**	**8,100**	**11,293**

Actives			Total Retirees, Disabled, Survivors and Active Members			Percent Distribution of Retirees, Disabled, Survivors and Active Members		
Male	Female	Total	Male	Female	Total	Male	Female	Total
1	4	5	38	13	51	75%	25%	100%
1,016	3,941	4,957	1,025	3,945	4,970	21	79	100
3,822	13,348	17,170	3,822	13,352	17,174	22	78	100
5,286	17,003	22,289	5,293	17,020	22,313	24	76	100
6,271	19,824	26,095	6,281	19,865	26,146	24	76	100
6,033	18,875	24,908	6,052	18,956	25,008	24	76	100
5,581	18,146	23,727	5,612	18,270	23,882	23	77	100
4,307	14,258	18,565	4,363	14,480	18,843	23	77	100
2,771	10,931	13,702	3,917	14,141	18,058	22	78	100
1,298	4,870	6,168	5,053	18,444	23,497	22	78	100
725	1,596	2,321	8,157	25,450	33,607	24	76	100
313	429	742	9,268	19,477	28,745	32	68	100
91	74	165	6,026	11,842	17,868	34	66	100
23	14	37	3,817	7,150	10,967	35	65	100
4	1	5	2,373	4,933	7,306	32	68	100
2	1	3	1,232	3,615	4,847	25	75	100
37,544	**123,315**	**160,859**	**72,329**	**210,953**	**283,282**	**26**	**74**	**100**

Benefit Recipients by Type as of June 30, 2018

		Type of Monthly Benefit					Subtypes of Age Retirement Benefit						
Monthly Benefit Range	Number of Recipients (all)	Retirement	Disability Retirement	Non-occupational Disability	Occupational Disability	Survivor Monthly Benefits	Regular 2.2 Flat Formula	Graduated Formula	Actuarial Benefit Style	ERO (2.2 & Grad. Form.)	ERI (State or TRS)	Other	Retirement Total
Under $500	6,512	5,578	4	1	-	929	1,276	1,422	2,877	2	-	1	5,578
$500 - $999	7,171	5,413	40	1	-	1,717	923	1,206	3,233	9	28	14	5,413
$1,000 - $1,499	6,570	4,999	95	6	-	1,470	1,007	1,340	2,465	69	102	16	4,999
$1,500 - $1,999	6,843	4,957	273	57	-	1,556	1,297	1,132	1,948	335	220	25	4,957
$2,000 - $2,499	7,184	5,416	152	74	1	1,541	1,720	1,002	1,596	706	371	21	5,416
$2,500 - $2,999	7,271	5,728	90	56	1	1,396	2,124	798	1,204	1,041	535	26	5,728
$3,000 - $3,499	7,032	5,973	52	38	3	966	2,419	606	876	1,332	712	28	5,973
$3,500 - $3,999	7,168	6,463	23	21	1	660	2,861	514	655	1,566	836	31	6,463
$4,000 - $4,499	7,913	7,420	19	10	-	464	3,399	556	586	1,905	914	60	7,420
$4,500 - $4,999	8,088	7,808	19	3	-	258	3,710	596	468	2,127	836	71	7,808
$5,000 - $5,499	8,035	7,879	7	2	-	147	3,693	660	402	2,191	835	98	7,879
$5,500 - $5,999	7,654	7,572	10	-	-	72	3,502	620	374	2,218	756	102	7,572
$6,000 - $6,499	6,844	6,787	10	-	1	46	3,168	613	247	2,147	504	108	6,787
$6,500 - $6,999	5,424	5,385	9	1	-	29	2,544	584	202	1,579	398	78	5,385
$7,000 - $7,499	4,579	4,559	3	-	-	17	2,108	573	139	1,295	362	82	4,559
$7,500 - $7,999	3,992	3,982	1	-	-	9	1,869	446	125	1,132	348	62	3,982
$8,000- $8,499	3,267	3,263	2	-	-	2	1,501	372	100	985	245	60	3,263
$8,500 - $8,999	2,747	2,740	-	-	-	7	1,228	370	43	871	182	46	2,740
$9,000 - $9,499	2,226	2,226	-	-	-	-	964	300	54	755	121	32	2,226
$9,500 - $9,999	1,725	1,724	-	-	-	1	753	199	53	590	85	44	1,724
$10,000 or more	4,178	4,171	1	-	-	6	1,821	677	108	1,252	206	107	4,171
Total benefit recipients:	**122,423**	**110,043**	**810**	**270**	**7**	**11,293**	**43,887**	**14,586**	**17,755**	**24,107**	**8,596**	**1,112**	**110,043**

Summary Statistics, all Benefit Recipients, as of June 30, 2018

	Age Retirement	Disability Benefits (3 types)	Survivor Benefits
Average Monthly Benefit	$4,776	$2,438	$2,146
Average Age	71	60	78
Average Service Credit	27	9	N/A
Average Years Receiving Benefits	13	16	10

Percentage of Retirement Benefits by Subtype						
Regular 2.2 Flat Form.	Graduated Formula	Actuarial Benefit Style	ERO (2.2 & Grad. Form.)	ERI (State or TRS)	Other	Retirement Total
40%	13%	16%	22%	8%	1%	100%

Average Benefit Payments for New Retirees, Last 10 Fiscal Years

Retirement Effective Dates		Years of Service: Under 5	5–9	10–14	15–19	20–24	25–29	30– 34	35-39	40+	All Fiscal Year Retirees	Average Age for all Fiscal Year Retirees	Average Service for all Fiscal Year Retirees
Period July 1, 2017 through June 30, 2018	**Average monthly benefit**	**$257**	**$735**	**$1,529**	**$2,558**	**$3,405**	**$4,633**	**$6,048**	**$6,954**	**$8,000**	**$4,316**	**age 61**	**25 years**
	Average final average salary	$52,883	$41,137	$58,671	$77,377	$84,015	$95,035	$104,219	$111,051	$118,480	$88,392		
	Number of retired members	154	269	337	423	585	576	633	855	73	3,905		
Period July 1, 2016 through June 30, 2017	**Average monthly benefit**	**$272**	**$787**	**$1,482**	**$2,497**	**$3,457**	**$4,589**	**$5,770**	**$6,581**	**$7,733**	**$4,162**	**age 61**	**25 years**
	Average final average salary	$59,017	$44,909	$56,887	$74,590	$85,524	$93,583	$99,597	$104,930	$111,419	$86,183		
	Number of retired members	184	255	351	426	615	587	666	816	102	4,002		
Period July 1, 2015 through June 30, 2016	**Average monthly benefit**	**$287**	**$715**	**$1,461**	**$2,407**	**$3,453**	**$4,595**	**$5,710**	**$6,496**	**$7,728**	**$4,130**	**age 61**	**25 years**
	Average final average salary	$63,114	$37,543	$55,895	$70,973	$84,277	$91,799	$97,075	$103,177	$110,395	$84,256		
	Number of retired members	193	289	330	429	660	630	728	832	107	4,198		
Period July 1, 2014 through June 30, 2015	**Average monthly benefit**	**$262**	**$744**	**$1,499**	**$2,338**	**$3,342**	**$4,331**	**$5,641**	**$6,237**	**$7,003**	**$3,977**	**age 61**	**25 years**
	Average final average salary	$55,476	$39,421	$56,937	$69,664	$81,069	$87,776	$95,675	$99,309	$100,159	$81,522		
	Number of retired members	185	277	325	466	651	591	647	882	94	4,118		
Period July 1, 2013 through June 30, 2014	**Average monthly benefit**	**$273**	**$775**	**$1,461**	**$2,267**	**$3,214**	**$4,349**	**$5,602**	**$6,118**	**$7,027**	**$4,058**	**age 61**	**26 years**
	Average final average salary	$54,810	$46,277	$52,702	$67,862	$78,513	$88,108	$94,508	$97,649	$102,670	$81,542		
	Number of retired members	173	313	348	403	695	574	774	1,037	133	4,450		
Period July 1, 2012 through June 30, 2013	**Average monthly benefit**	**$279**	**$771**	**$1,424**	**$2,237**	**$3,179**	**$4,232**	**$5,396**	**$6,066**	**$7,369**	**$4,070**	**age 61**	**26 years**
	Average final average salary	$59,313	$42,291	$49,881	$66,108	$76,095	$83,918	$90,517	$96,245	$101,109	$79,689		
	Number of retired members	149	298	353	391	673	664	750	1,115	142	4,535		
Period July 1, 2011 through June 30, 2012	**Average monthly benefit**	**$271**	**$787**	**$1,426**	**$2,354**	**$3,159**	**$4,310**	**$5,568**	**$6,214**	**$7,273**	**$4,292**	**age 60**	**27 years**
	Average final average salary	$63,513	$49,970	$53,199	$68,176	$76,104	$85,929	$92,839	$98,975	$103,131	$83,346		
	Number of retired members	215	358	375	380	620	702	923	1,516	177	5,266		
Period July 1, 2010 through June 30, 2011	**Average monthly benefit**	**$281**	**$712**	**$1,317**	**$2,171**	**$2,989**	**$4,097**	**$5,190**	**$5,708**	**$6,527**	**$3,984**	**age 60**	**27 years**
	Average final average salary	$59,267	$40,317	$48,191	$62,212	$71,841	$81,416	$86,636	$91,033	$92,605	$76,805		
	Number of retired members	160	328	349	357	599	562	905	1,359	134	4,753		
Period July 1, 2009 through June 30, 2010	**Average monthly benefit**	**$280**	**$670**	**$1,228**	**$2,121**	**$2,947**	**$3,891**	**$5,063**	**$5,621**	**$5,819**	**$3,960**	**age 60**	**27 years**
	Average final average salary	$61,557	$38,116	$44,679	$62,156	$71,152	$77,352	$84,466	$89,648	$82,289	$75,507		
	Number of retired members	144	312	304	335	495	536	887	1,410	118	4,541		
Period July 1, 2008 through June 30, 2009	**Average monthly benefit**	**$247**	**$642**	**$1,181**	**$2,012**	**$2,920**	**$3,941**	**$4,940**	**$5,411**	**$6,457**	**$3,840**	**age 59**	**27 years**
	Average final average salary	$55,946	$39,118	$42,853	$57,824	$70,216	$78,684	$82,544	$86,467	$92,170	$73,725		
	Number of retired members	155	295	240	297	472	425	779	1,301	65	4,029		

Principal Participating Employers

		Year ended June 30, 2018			Year ended June 30, 2009		
Participating Employer	City	Rank	Covered Employees (including subs)	Percentage of Total TRS Membership	Rank	Covered Employees	Percentage of Total TRS Membership
School District U46	Elgin	1	3,050	1.9%	1	3,258	2.0%
Indian Prairie CUSD 204	Naperville	2	2,518	1.6	2	2,725	1.6
Rockford School District 205	Rockford	3	2,344	1.5	4	2,396	1.4
Plainfield SD 202	Plainfield	4	2,341	1.5	3	2,508	1.5
Community USD 300	Algonquin	5	1,890	1.2	6	1,643	1.0
Naperville CUSD 203	Naperville	6	1,864	1.2	5	1,680	1.0
Oswego CUSD 308	Oswego	7	1,857	1.2	-	-	-
Valley View CUSD 365	Romeoville	8	1,752	1.0	7	1,624	1.0
Schaumburg CCSD 54	Schaumburg	9	1,728	1.0	10	1,422	0.8
Springfield SD 186	Springfield	10	1,423	0.8	8	1,583	0.9
Peoria SD 150	Peoria	-	-	-	9	1,531	0.9
Total, largest 10 employers			**20,767**	**12.9%**		**20,370**	**12.0%**
All Other (980 employers in 2018*; 1,020 employers in 2009)			140,092	87.1%		148,788	88.0%
Grand total			**160,859**	**100.0%**		**169,158**	**100.0%**

*Other Employers by Type as of June 30, 2018	Number of Other Employers	Other Covered Employees
Local school districts	841	133,485
Special districts	127	5,974
State agencies	12	633
Total, all employers other than largest 10	**980**	**140,092**

Total Employers by Type as of June 30, 2018	Total Number of Employers	Total Covered Employees
Local school districts	851	154,252
Special districts	127	5,974
State agencies	12	633
Total, all employers	**990**	**160,859**