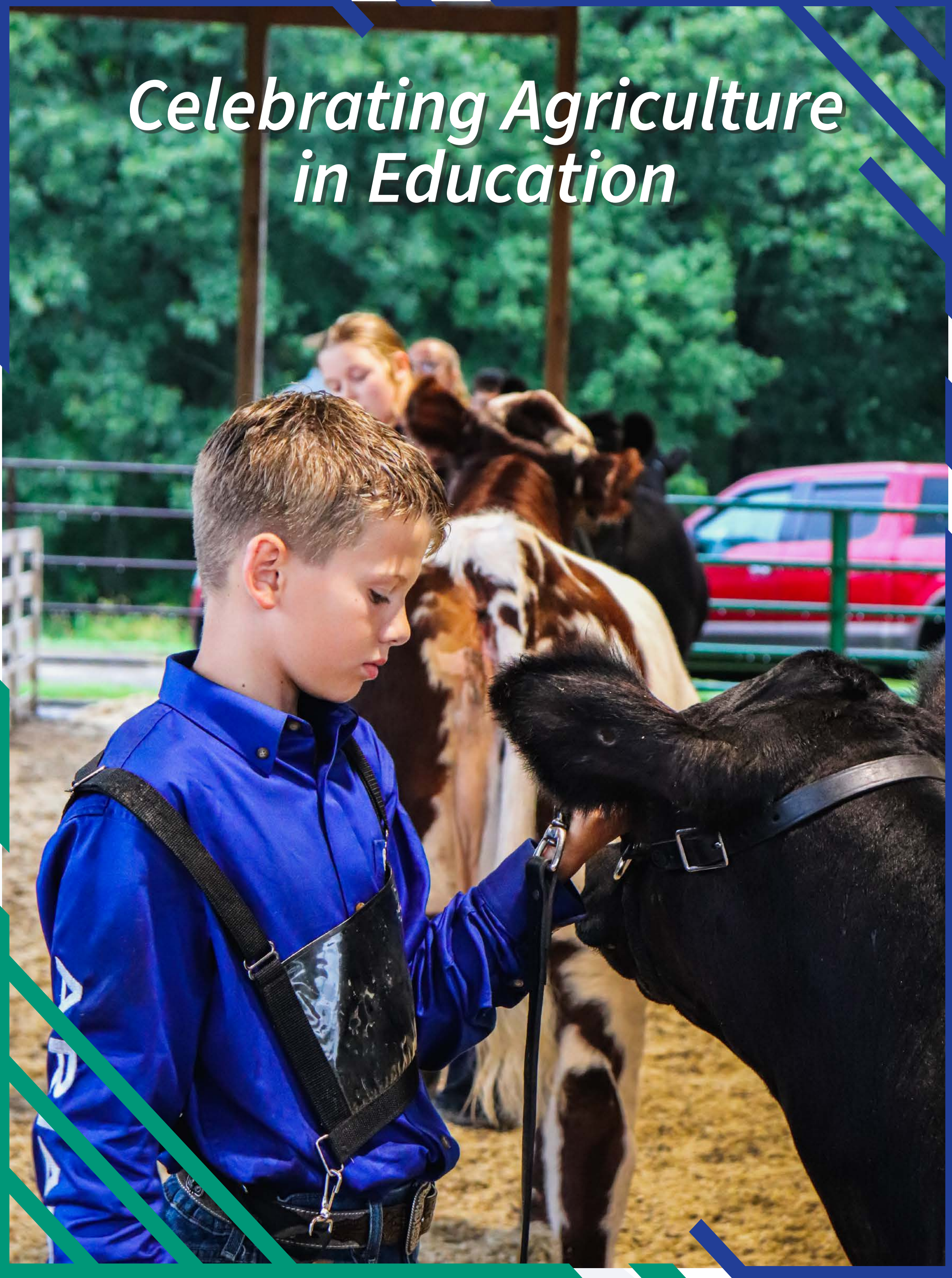

Annual Comprehensive Financial Report

For the Fiscal Year Ended June 30, 2022

Teachers' Retirement System of the State of Illinois
a component unit of the State of Illinois

Cover photo: Kenson Welsh and other 4-H members lining up their cattle in the show ring at the McDonough County Fair.

Fiscal Year 2022 Highlights

Active contributing members	165,566
Inactive noncontributing members	144,801
Benefit recipients*	129,466
Total membership	439,833
Investment return	
Total fund investment return, net of fees	(1.17%)
Actuarial information	
Actuarial accrued liability (AAL)	$143,523,730,959
Less actuarial value of assets (AVA)	62,910,402,178
Unfunded actuarial accrued liability, AVA basis (UAAL)	$80,613,328,781
Funded ratio (AVA/AAL)	43.8%
Less fair value of assets (FVA)	$62,833,626,339
Unfunded actuarial accrued liability, FVA basis (UAAL)	$80,690,104,620
Funded ratio (FVA/AAL)	43.8%
GASB Statement No. 67 disclosures	
Total pension liability (TPL)	$146,673,960,220
Less fiduciary net position (FNP)	62,833,626,339
Net pension liability (NPL)	$83,840,333,881
FNP as a percentage of TPL	42.8%
Additions	
Member contributions	$1,073,361,807
Employer contributions	120,876,905
State of Illinois contributions	5,866,799,836
Total investment loss	(743,042,373)
Participant fee income	3,029
Total additions	$6,317,999,204
Deductions	
Benefits paid	$7,607,019,502
Refunds paid	62,556,744
Administrative expenses	28,372,371
Contributions sent to third-party administrator	721,424
Total deductions	$7,698,670,041

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

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Annual Comprehensive Financial Report

for the fiscal year ended June 30, 2022

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

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

PREFACE

CELEBRATING AGRICULTURE IN EDUCATION

For FY22, the *Annual Comprehensive Financial Report* of the Teachers' Retirement System of the State of Illinois focuses on agricultural education in the Prairie State.

Agriculture is *big* in Illinois.

Farmland covers 27 million acres of the Prairie State or more than 75 percent of the state's total land area. Agricultural commodities — including corn, soybeans, wheat and livestock, as well as horseradish and Christmas trees — generate more than $19 billion in economic activity each year. Illinois ranks third nationally in the export of agricultural products to other countries with roughly $8.2 billion in sales. Together, the state's agricultural industries employ more than 1 million people.

There are more than 70,000 farm operations across the state, many involving generations of Illinois families. More than 10,000 farms have been owned by the same family for at least a century. Five farms have been in the same family's hands for at least 200 years.

Remrey Sandrock competed in the annual Pedal Pull competition at the Whiteside County Fair.

It's no surprise then, that agricultural education is also big in Illinois.

There are 355 agricultural programs in Illinois schools, ranging from pre-kindergarten through 12th grade. Total enrollment in these programs exceeds 38,000 students and they are led by more than 450 agriculture teachers. More than 20,500 of these students also belong to the Future Farmers of America (FFA), the nation's premier educational and vocational organization for the agricultural industry.

Teachers guide their K-12 students through the full array of career pathways — agribusiness, food science, animal systems, plant systems, natural resources, environmental services, biotechnology and technical support systems. There are 35 colleges and universities in Illinois that offer 74 agricultural-related degrees and certificate programs. In 2021, more than 5,700 students in Illinois were enrolled in collegiate agricultural programs.

Every year, students enrolled in school agriculture programs and FFA members come together at county and state fairs across Illinois to celebrate their achievements. Teachers and students share their knowledge with each other and introduce hundreds to livestock, commodities, farm machinery and rural culture.

For these teachers and students, agriculture is more than a profession. It is a passion and a way of life. They become true ambassadors to the past, present and future of Illinois' largest and most enduring industry.

Previous page: *The Illinois State Fair gives students an opportunity to get up close and personal with cows and other livestock.*

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INVESTMENTS

ACTUARIAL

STATISTICAL

Livestock Judging — Circa 1950s McDonough County Fair

The 4-H clubs in McDonough County have been helping youth advance through life for 100 years at their county fairgrounds. This year at the annual 4-H Fair, 79 young people showcased 312 projects, including raising cattle, tractor safety, growing a vegetable garden, training a dog, cooking and woodworking. Many of the 4-H adult volunteers are current and retired teachers in the area.

Livestock Judging — 2022 Illinois State Fair

The agricultural industry greatly expanded in Illinois by the 1840s and farmers and landowners began meeting during the harvest season to display and share farming products and ideas. A decade later, those meetings became state fairs. Communities throughout the state would gather annually to promote agricultural knowledge and increase farming productivity. The first state fair in Illinois was held in Springfield in 1853 with an admission fee of just 25 cents. Over the next 40 years, the fair was held in various cities throughout Illinois. In 1894, Springfield was chosen as the permanent home for the Illinois State Fair.

INTRODUCTION

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Teachers' Retirement System of the State of Illinois

For its Annual Comprehensive Financial Report
For the Fiscal Year Ended

June 30, 2021

Christopher P. Morrill

Executive Director/CEO

Public Pension Coordinating Council

Recognition Award for Administration
2022

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
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members@trsil.org | https://www.trsil.org
R. Stanley Rupnik, Executive Director & Chief Investment Officer

LETTER OF TRANSMITTAL

December 13, 2022

To the TRS Board of Trustees and TRS Members:

We are pleased to present the *Annual Comprehensive Financial Report* for the Teachers' Retirement System of the State of Illinois (TRS) for the fiscal year ended June 30, 2022. This report details the on-going work of the System's trustees and staff to fulfill the TRS mission and keep the retirement promises made by the State of Illinois to educators in its public schools.

Concluding its 83rd year of operation in FY22, the System overcame two primary challenges to its mission during the year – the lingering COVID-19 Pandemic and increased volatility and uncertainty in worldwide financial markets.

MEMBER SERVICES UNAFFECTED BY THE COVID-19 PANDEMIC

Just as TRS members rose to the on-going challenges of the COVID-19 pandemic in FY22, TRS as an agency met – or exceeded – the goals set for it by members, taxpayers and elected officials:

- Ensure all benefits are paid on time.
- Work personally with members on their individual needs.
- Continue as a trusted resource on retirement matters.
- Quickly and accurately process all retirement claims.
- Navigate the economic uncertainty created by the pandemic to protect members' money and enhance the trust fund as much as possible.

TRS paid $7.6 billion in member benefits on time and in full. More than 3,400 retirement claims were processed. The System's Call Center handled more than 117,000 telephone requests for assistance and approximately 60,000 emails from members and their families.

Lessons learned during the first two years of the pandemic led to changes in the way TRS operates internally and deals with its members.

The TRS staff proved that the system's crucial business operations can be accomplished effectively and efficiently via remote work during unprecedented circumstances. In a nod to the success of these alternate working conditions, when TRS transitioned back to an in-office work schedule, the System initiated a pilot program that offers staff the choice of working from a remote location for up to two days each week. The option has been enthusiastically received and there has been no reduction in staff productivity.

The TRS Member Services Department adapted to the pandemic by developing a successful series of virtual meetings to replace or supplement in-person meetings. Surveys indicate that our members enjoy the flexibility of online presentations, so the option for our members – in person or virtual – is here to stay.

The annual TRS Fall Member Meetings generated a total attendance of 6,060 members during 40 sessions. Between January and March, Member Services hosted 30 “It’s Time to Retire” webinars for 1,990 members that focused on helping about-to-retire members ease into the retirement process. Members Services also hosted eight “What’s Next” webinars for 721 members. These presentations explained what happens to newly retired members after their last day of service.

In May 2022, after more than two years of limiting direct access to TRS's facilities due to health and safety protocols, the System welcomed members, business associates and the public back into our offices in the state capital of Springfield and the Chicago suburb of Lisle.

MEMBER ASSETS PROTECTED IN A VOLATILE ECONOMY

Along with uninterrupted services and the distribution of benefits, the System protected the bulk of member assets in a year when many other public retirement plans saw higher reductions in asset value due to volatility in the economy.

While TRS recorded a (1.17) percent net of fee return for FY22, the median annualized public pension fund investment return for the 12 months ended on June 30 was over (7) percent, gross of fees, according to RVK, Inc., the System’s general investment consultant. The TRS rate of return, gross of fees, in FY22 was (0.56) percent. The Standard & Poor’s 500 Index reported a return for the year ended on June 30 of (10.6) percent.

Due in part to the chronic under-funded status of TRS, the System’s primary objective is to protect member assets. Accordingly, the most prudent strategy is a conservative, diversified portfolio that seeks to participate in the upside of the market but also is positioned to better protect assets in times of high market volatility and large market drawdowns.

Within an environment of economic instability during FY22, the TRS conservative strategy performed as intended. As significant market volatility, rising inflation and interest rate increases hit in early calendar year 2022, the TRS portfolio performed favorably to other measurements used in the financial industry.

While an investment return of (1.17) percent in a volatile year broke a string of 12 consecutive years of positive investment returns, the FY22 rate of return did no lasting harm to the System’s financial position:

- TRS ended FY22 with $62.5 billion in investment assets, a 2.1 percent reduction from the $63.9 billion in investment assets reported at the end of FY 2021.
- At the end of FY22, the 40-year rate of investment return for TRS was 9.3 percent, which bests the System’s estimated long-term investment rate of 7 percent. The System focuses its attention on its long-term investment return rate because TRS nurtures relationships with its members that last for several decades.
- For the second straight fiscal year, the TRS long-term funded ratio improved, reaching 43.8 percent at the end of FY22. That is a positive increase of 3.3 percent over the last two years. In the previous 10 years, the TRS funded ratio averaged 40.7 percent. The ratio improved primarily because of consistently positive investment returns over the last five years combined with steady state funding.

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. TRS is governed by a 15-member Board of Trustees. Trustees include the state superintendent of education, seven trustees appointed by the governor, five trustees elected by contributing TRS members and two trustees elected by TRS annuitants. The president of the Board of Trustees, by law, is appointed by the governor from among the sitting trustees. The Board of Trustees elects its vice president from among its members. The Board of Trustees appoints an executive director who also serves as the secretary of the Board of Trustees. The executive director is responsible for daily operations at TRS.

Pursuant to Section 16-204 of the Illinois Pension Code, 40 ILCS 5/16-204, the Board of Trustees of TRS established the TRS Supplemental Savings Plan (SSP), effective October 29, 2019. The SSP is an eligible deferred compensation plan (DCP) under Section 457(b) of the Internal Revenue Code and is a governmental plan within the meaning of Code Section 414(d) and Section 3(32) of the Employee Retirement Income Security Act of 1974.

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

TRS staff issues an *Annual Comprehensive Financial Report* 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 TRS monitor and safeguard assets and promote efficient operations. Each year TRS's financial statements are audited by a professional accounting firm that serves as a special assistant auditor employed by the Illinois Auditor General. In addition, a biennial 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 an *Annual Comprehensive Financial Report* 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 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. Four 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.

ADDITIONS AND DEDUCTIONS

The three sources of TRS defined benefit funding are member contributions, investment income and employer contributions through state appropriations and payments by employers. TRS defined benefit deductions include payments of benefits, refunds and administrative expenses. Additions to deferred compensation include member and employer contributions. Deferred compensation deductions comprise of contributions sent to third-party administrator and administrative expenses. Negative amounts are shown in parentheses () throughout this report.

Additions ($ millions)

Source	2022	2021	Increase/(Decrease) Amount	Increase/(Decrease) % Change
Member contributions	$1,073	$1,023	$50	4.9%
Employer contributions	121	98	23	23.9
State of Illinois contributions	5,867	5,141	726	14.1
Total investment income (loss)	(743)	13,046	(13,789)	(105.7)
Participant fee income	-	-	-	-
Total	**$6,318**	**$19,308**	**($12,990)**	**(67.3%)**

Deductions ($ millions)

Source	2022	2021	Increase/(Decrease) Amount	Increase/(Decrease) % Change
Benefits payments	$7,607	$7,324	$283	3.9%
Refunds	63	64	(1)	(2.6)
Administrative/ other	28	24	4	19.4
Contributions sent to third-party administrator	1	-	1	100.0
Total	**$7,699**	**$7,412**	**$287**	**3.9%**

Note: % change is based on financial statement values (not rounded).

The TRS Board of Trustees and staff remain vigilant in their efforts to improve the retirement system's funded status for current and future members. TRS continues to invest prudently and in a disciplined manner for the benefit of TRS 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 their circumstances.

INVESTMENTS

The TRS investment portfolio returned (1.17) percent, net of fees, for the fiscal year ended June 30, 2022. Total investment assets decreased approximately $1.3 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 which 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 72 to 81 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, 2022, the funded ratio based on the actuarial value of assets of the Teachers' Retirement System increased to 43.8 percent from its June 30, 2021 level of 42.5 percent. The actuarial value of assets at year end was $62.9 billion and the actuarial accrued liability was $143.5 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

Supplemental Savings Plan — Optional Defined Contribution Benefit Plan

In March 2022, Teachers' Retirement System launched its first-ever "deferred compensation" (DC) optional savings plan to assist members with their retirement planning — the TRS Supplemental Savings Plan, or "SSP."

In less than a year, interest in the SSP has been growing. As of June 30, more than 600 TRS employers have signed participant agreements, 376 members have enrolled and $722.8 thousand has been deferred thus far to participant accounts.

The SSP is a 457(b) plan, administered by Voya Financial. Mandated by state law, the SSP is optional for eligible TRS members. Active TRS members in Tier 1 and Tier 2 who are full-time and part-time contractual employees are eligible to enroll. Retired and inactive TRS members are not eligible for the SSP.

The SSP DC plan supplements the existing TRS defined benefit (DB) pension plan. SSP participants now have the option of two TRS sources of income in retirement – a pension that guarantees a specified benefit every month, and a DC retirement savings account. The SSP does not replace the DB plan for participating members. TRS members cannot opt out of the DB plan and place their DB contributions into the new SSP.

The 457(b) plan is offered through participants' employers, and contributions are deducted from members' paychecks. Participants choose from an array of investment options developed by TRS and Voya. To help defray the cost of administration, SSP participants pay an annual fee.

Gemini Pension Administration System (PAS)

The implementation of the new Gemini System continues with development focused on "pay-period reporting" from school districts and other TRS employers. This new system requires employer reporting to TRS after each pay period rather than through one annual report under the legacy system.

The goal of this conversion is to provide a modern, viable and secure pension system to support the mission of TRS with a focus on our members. With the completion of the employer pay period reporting module of the system, the 992 employers with employees that participate in TRS will deliver timely data for each of the members through the payroll process. A dedicated team continues to work on the transition with vendors and employers.

Another important TRS initiative that works in cooperation with the new Gemini Employer Portal is the technical side of the Supplemental Savings Plan. The SSP has been in development since 2018, when the Illinois General Assembly enacted a law that requires TRS and other state retirement systems to create defined contribution plans to supplement the existing defined benefit (DB) plans. This law required that TRS establish the SSP and administer the plan in such a way that member contributions can be transferred from paycheck to third-party plan administrator, Voya Financial, in a timely manner.

In March 2022, the first payroll contributions from SSP participants were collected by employers and forwarded to Voya.

Accelerated Benefit Payment Programs

Adhering to legislation approved in 2018, during the last year TRS continued to administer two accelerated pension benefit programs for members. Since the inception of the programs in 2019, participating TRS members have requested nearly $575 million in buyout funds. The original $1 billion state bond authorization to fund the payments was exhausted in 2022. Given the continued interest in the programs, an additional $1 billion was approved by the Illinois General Assembly and **Governor JB Pritzker** during the 2022 spring session. Public Act 102-0718 authorized $1 billion in general obligation bond sales to fund the programs. The law also extended the sunset date for both initiatives from 2024 to 2026.

Through FY22, newly retiring TRS members participating in the “Accelerated Automatic Increase” program shared approximately $345 million. Overall, over 2,600 retiring members decided to participate.

Inactive members in the “Accelerated Pension Benefit” program shared $230 million. Overall, over 1,800 eligible inactive members decided to participate.

State Funding Commitment and Consistency

Governor JB Pritzker and the General Assembly continued to make pension system funding by state government a priority in FY22. Despite state revenue and budget problems caused by the ongoing COVID-19 pandemic, TRS received its full $5.7 billion, statutorily required appropriation on a timely basis.

And for the first time in more than a decade, Gov. Pritzker added an additional $500 million to the minimum contribution required for TRS and the state’s other pension systems. The TRS portion was $288 million of the $500 million. The goal of this additional contribution is to reduce future long-term liability of the state’s pension systems by $1.4 billion.

Commitment to Diversity

TRS continues to strengthen its existing commitment to diversity within the management of its $62.5 billion investment portfolio. The TRS Board of Trustees is committed to continually improving access to the investment program for qualified firms owned by minorities, women and those with disabilities.

In the last five years, the total assets in the TRS portfolio managed by Minority and Women Business Enterprises (MWBE) has increased from $10.3 billion to $18.4 billion. In each of the last five years, TRS has exceeded the state's annual aspirational goal to have 20 percent of total assets managed by MWBE firms. At the end of FY22, TRS commitments to MWBE firms totaled $18.4 billion, or 29.4 percent of the System’s total portfolio.

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 *Annual Comprehensive Financial Report* for the fiscal year ended June 30, 2021. This was the 33rd 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 *Annual Comprehensive 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 the current *Annual Comprehensive 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 2022 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 TRS 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 TRS employers form a link between TRS and its members. Their cooperation contributes significantly to the System's success. We hope all recipients of this report find it informative and useful. This report is also available to the general public on **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.

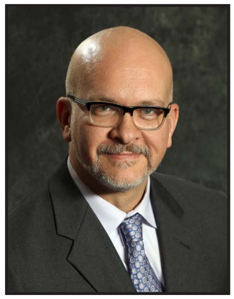
R. Stanley Rupnik
Executive Director & Chief Investment Officer

Deron Bertolo
Chief Financial Officer

TRS BOARD OF TRUSTEES

AS OF DECEMBER 1, 2022

Matthew Hunt
President
Appointed
Glen Ellyn



Andrew Hirshman
Vice President
Elected
Oak Park

Beth Anderson
Elected
Kankakee

Dr. Carmen I. Ayala
Ex Officio
Downers Grove

Kevin (Duffy) Blackburn
Appointed
Joliet

Joseph Blomquist
Elected
St. Charles

Marsha Byas
Elected
Marion

Michael Goetz
Appointed
Springfield

Maria "Mia" Jazo-Harris
Appointed
Bloomington

Maureen Mena
Appointed
Bolingbrook

David Miller
Appointed
Lynwood

Fred Peronto
Elected
Elmhurst

Larry Pfeiffer
Elected
Carlinville

Doug Strand
Elected
East Moline

TRS ORGANIZATION
EXECUTIVE CABINET
AS OF DECEMBER 1, 2022

Stan Rupnik, CFA
Executive Director & Chief Investment Officer

Deron Bertolo
Chief Financial Officer

Lori Dour
Chief Benefits Officer

Michelle Kissel
Director of Human Resources

Gloria Lasley, MBA, CISSP, PMP
Chief Operating Officer

Emily Peterson
General Counsel

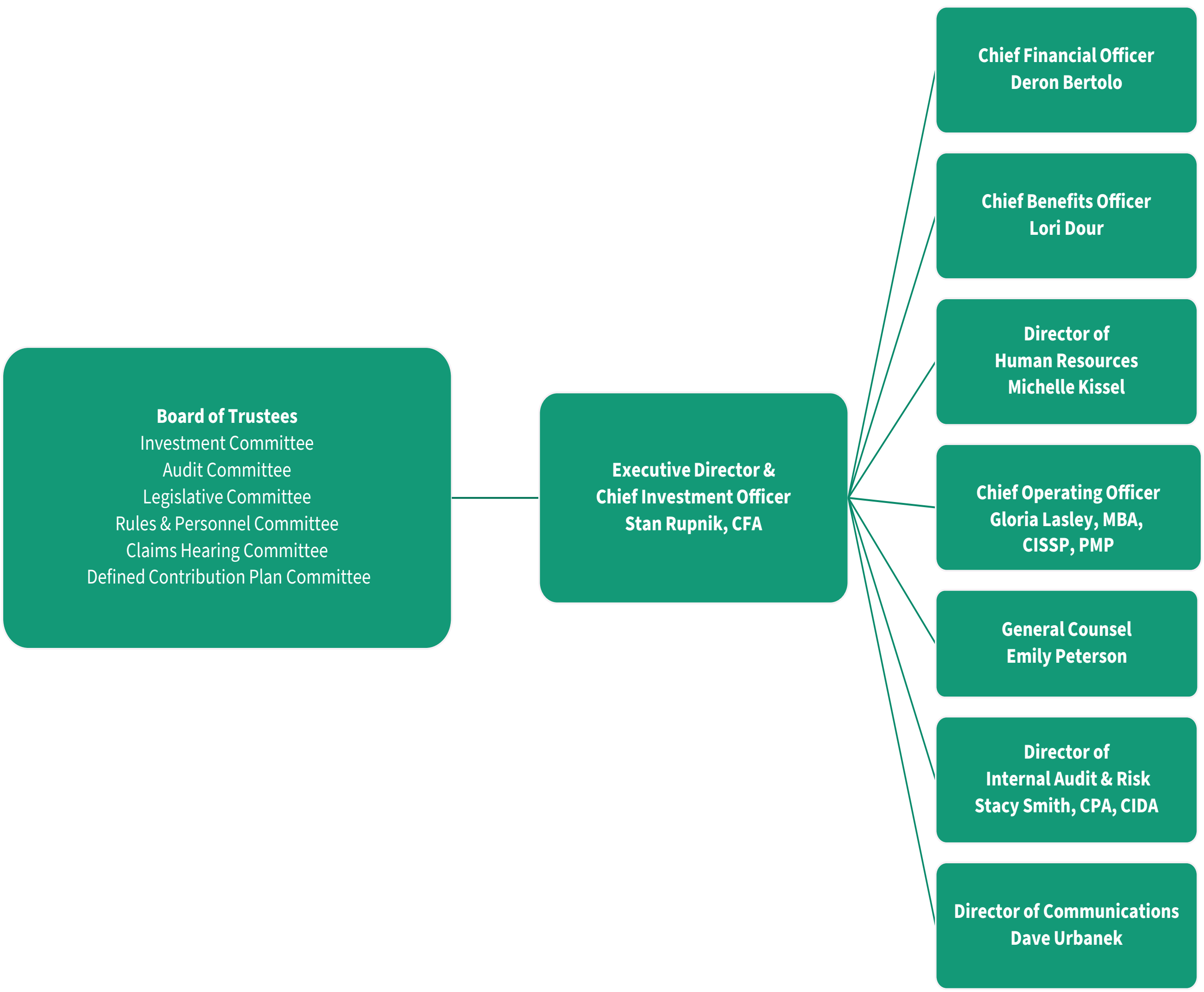
Stacy Smith, CPA, CIDA
Director of Internal Audit and Risk

Dave Urbanek
Director of Communications

TRS 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 interests of others first
- Diversity
- Teamwork
- Continuous improvement



CONSULTING AND PROFESSIONAL SERVICES

ACTUARY

The Segal Company Midwest, Inc.

EXTERNAL AUDITORS

(Special assistants to the Office of the Auditor General)

FORVIS, L.L.P.

LEGAL SERVICES

DLA Piper, L.L.P.

Elrod Friedman L.L.P.

Holland & Knight, L.L.P.

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

Ice Miller L.L.P.

Nixon Peabody L.L.P.

Reinhart Boerner Van Deuren s.c.

Whitt Law, L.L.C.

LEGISLATIVE CONSULTING

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

INFORMATION TECHNOLOGY

Apex Systems

Capitol Strategies Consulting Inc.

Compulink Management Center Inc.

Dayagdag, Chris

Decker Innovations Inc.

Ellerman, Greg

HSO North America, L.L.C.

McDonald Hopkins L.L.C.

Mellor, William Thomas

Mythics Emergent Group Inc.

Promet Solutions Corporation

Sentinel Technologies, Inc.

Telos Corporation

The Segal Company Midwest, Inc.

INTERNAL AUDIT

Investment Training & Consulting Institute, Inc.

OPERATIONS

CAPFinancial Partners, L.L.C. (formerly known as Cammack Retirement Group, Inc.)

CEM Benchmarking, Inc.

Higher Logic, L.L.C.

Hudepohl & Associates Inc.

Jasculca Terman Strategic Communications

Management Association

SABA Software

The Segal Co. Western Stats Inc.

MASTER TRUSTEE

State Street Bank and Trust Company

SECURITIES LENDING AGENT

Citibank, N.A.

INVESTMENT CONSULTANTS

Aksia, L.L.C. *(Diversifying strategies and private debt)*

RVK, Inc. *(General investment)*

Stepstone Group, L.P. *(Private equity)*

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

CO-INVESTMENT ADVISORS

Meketa Investment Group, Inc.

Stout Risius Ross, Inc.

SECONDARY MARKET ADVISORS

Evercore Group L.L.C.

TAX ADVISORY SERVICES

Ernst & Young Private, Ltd.

Parker Lindskog at the Jr. Hog Show during the Whiteside County Fair.

FINANCIAL

FORV/S
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P 217.429.2411 / F 217.429.6109
forvis.com

Independent Auditor's Report

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

Opinion

As Special Assistant Auditors for the Auditor General, we have audited the 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, 2022, and the related 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.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the fiduciary net position of the System as of June 30, 2022, and the respective changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the System, and to meet our ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Emphasis of Matter

The actuarially determined net pension liability, calculated as required by GASB Statement No. 67, *Financial Reporting for Pension Plans*, 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.

Responsibilities of Management 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgement made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- exercise professional judgement and maintain professional skepticism throughout the audit.

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.

- obtain an understanding of internal control relevant to the audit 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, no such opinion is expressed.

- evaluate the appropriateness of accounting polices used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

- conclude whether, in our judgement, there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

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

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the System's basic financial statements. The other supplementary financial information in the financial section, as listed in the table of contents, 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 basic financial statements. The other supplementary financial information in the financial section, as listed in the table of contents, has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplementary financial information in the financial section, as listed in the table of contents, is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the introduction, investments, actuarial and statistical sections, as listed in the table of contents but does not include the basic financial statements and our auditor's report thereon. Our opinion on the basic financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

FORVIS, LLP

Decatur, Illinois
December 13, 2022

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, 2022. 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 fiduciary net position of TRS at June 30, 2022 was $62.8 billion.
- During FY22, the fiduciary net position of TRS decreased $1.4 billion.
- Defined benefit contributions from members, employers and the State of Illinois were $7.1 billion, an increase of $798.5 million or 12.8 percent for FY22.
- Deferred compensation contributions of $722.8 thousand from employers and members started in March 2022.
- Total net investment loss was ($743.0) million, compared to $13.0 billion gain in FY21, a decrease of $13.8 billion.
- Defined benefits and refunds paid to members and annuitants were $7.7 billion, an increase of $281.4 million or 3.8 percent.
- The actuarial accrued liability was $143.5 billion at June 30, 2022.
- The unfunded actuarial accrued liability was $80.6 billion at June 30, 2022. The funded ratio was 43.8 percent at June 30, 2022. 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 (TPL) was $146.7 billion at June 30, 2022.
- The net pension liability (NPL) was $83.8 billion at June 30, 2022. The plan fiduciary net position, as a percentage of total pension liability, was 42.8 percent.

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

Statement of Fiduciary Net Position. This statement reports the fiduciary 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 June 30, 2022 net position (assets less liabilities) available for the payment of benefits and other fiduciary activities of the System.

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 fiduciary 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.

Plan Changes. The financial statements and notes presented in the TRS FY22 ACFR will include two separately reported plans, as opposed to one in prior years. The plans to be included are the TRS Defined Benefit Pension Plan as a fiduciary component unit of TRS and the Deferred Compensation Plan, not a component unit of TRS but a custodial fund reporting fiduciary activities.

The following are condensed comparative financial statements.

CONDENSED COMPARATIVE STATEMENTS OF FIDUCIARY NET POSITION AS OF JUNE 30

	2022	Percentage Change	2021
Cash	$19,555,871	20.2%	$16,263,026
Receivables and prepaid expenses	5,290,933,248	18.4	4,468,795,311
Investments	62,528,309,625	(2.1)	63,851,832,280
Invested securities lending collateral	2,183,903,100	(10.0)	2,425,695,348
Capital assets	8,238,075	(2.6)	8,453,925
Total assets	**70,030,939,919**	**(1.0)**	**70,771,039,890**
Total liabilities	**7,199,105,736**	**9.8**	**6,558,534,870**
Total fiduciary net position	**$62,831,834,183**	**(2.2%)**	**$64,212,505,020**

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

	2022	Percentage Change	2021
Contributions	$7,061,038,548	12.8%	$6,261,774,388
Net investment income (loss)	(743,042,373)	(105.7)	13,046,153,685
Participant fee income	3,029	100.0	-
Total additions	6,317,999,204	(67.3)	19,307,928,073
Benefits and refunds	7,669,576,246	3.8	7,388,142,712
Administrative expenses	28,372,371	19.4	23,758,112
Contributions sent to third-party administrator	721,424	100.0	-
Total deductions	7,698,670,041	3.9	7,411,900,824
Net increase/decrease in fiduciary net position	**(1,380,670,837)**	**(111.6)**	**11,896,027,249**
Total fiduciary net position - beginning of year	**64,212,505,020**	**22.7**	**52,316,477,771**
Total fiduciary net position - end of year	**$62,831,834,183**	**(2.2%)**	**$64,212,505,020**

FINANCIAL ANALYSIS

TRS was created to provide retirement, survivor and disability benefits to qualified members. Increases or decreases in the plan's fiduciary net position serve as useful indicators of TRS's financial position. The fiduciary net position was $62.8 billion at June 30, 2022.

CONTRIBUTIONS

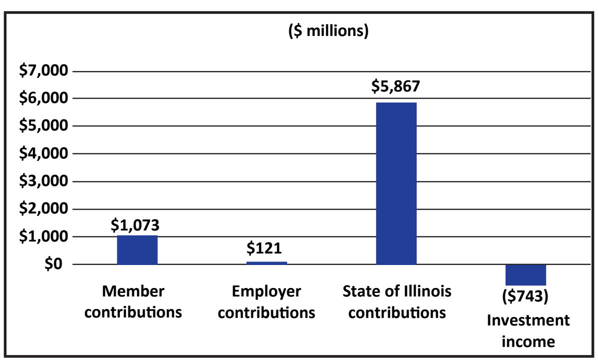
Defined benefit contributions increased $798.5 million during FY22. Contributions from the State of Illinois increased $726.1 million, member contributions increased $49.1 million and employer contributions from school districts increased $23.3 million.

The new TRS Deferred Compensation Plan, a 457(b) plan, started accepting contributions in March 2022. Deferred compensation contributions totaled $0.7 million.

Public Act 100-0023 requires that the impact on state contributions due to changes in actuarial assumptions be phased in over five years on a retroactive basis.

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, 2022



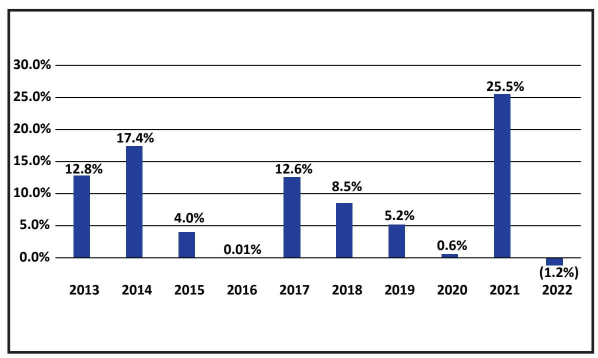
INVESTMENTS

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 declined (1.2) percent, net of fees, for the fiscal year ended June 30, 2022. Increased market volatility, lowered economic growth forecasts, rising interest rates and geopolitics influenced markets with few options for capital preservation. In a volatile year for worldwide financial markets, the investment strategy employed by TRS protected assets and limited the System's portfolio loss. While a negative investment return broke a string of 12 consecutive years of positive investment returns, the FY22 rate of return did no lasting harm to the System's financial position.

During the fiscal year, total TRS investment assets decreased approximately $1.3 billion, incurring a net investment loss of $743 million. The significant decline in investment income was due to the year over year decrease in the annual rate of return.

Annual Rate of Return (net of investment expenses)

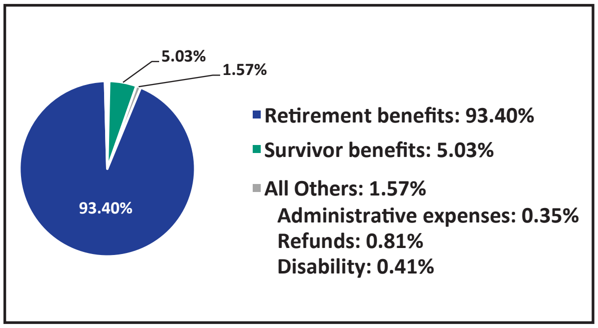


DEFINED BENEFITS AND REFUNDS

Retirement, survivor and disability benefit payments increased $283.0 million during FY22. Benefit payments increased to $7.6 billion with 129,466 recipients in FY22. 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 114,252 as of June 30, 2021 to 115,778 as of June 30, 2022.

Refunds of contributions decreased $1.6 million in FY22. The decrease during FY22 is the result of fewer member and retirement refunds.

Defined Benefit Deductions by Type for the Year Ended June 30, 2022



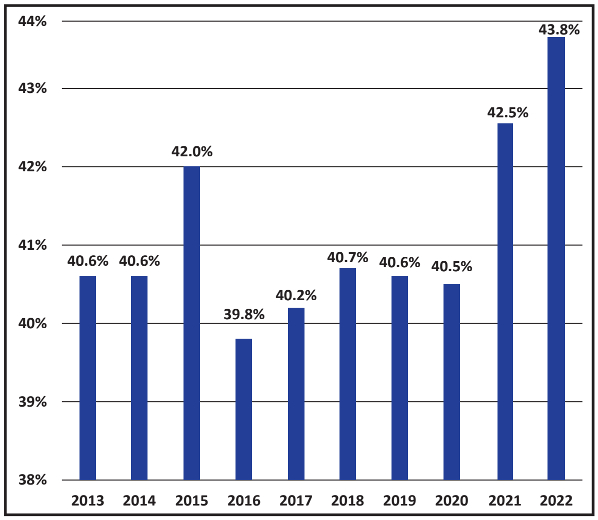
ACTUARIAL

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 $4.6 billion in FY22 to $143.5 billion at June 30, 2022. 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 based on the actuarial value of assets increased $679 million during FY22 to $80.6 billion at June 30, 2022. The funded ratio reflects the percentage of the actuarial accrued liability covered by the actuarial value of assets. The funded ratio increased from 42.5 percent on June 30, 2021 to 43.8 percent on June 30, 2022.

The actuarial unfunded liability and funded ratio are based on the actuarial 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 actuarial 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.

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 (NPL) and total pension liability (TPL) 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 TPL is $146.7 billion at June 30, 2022, while the NPL is $83.8 billion at June 30, 2022.

LEGISLATIVE

In addition to new programs and initiatives, TRS was affected by the enactment of several new laws during FY22:

Deferred Compensation Plan Auto-Enrollment — Public Act 102-0540

All new TRS members must be enrolled in the Supplemental Savings Plan (SSP). The act was signed on August 20, 2021 and TRS set a target date of January 1, 2023 to begin auto enrollment. New TRS members who begin their service in 2023 will have 3 percent of their compensation deferred into a personalized SSP account. All auto-enrolled members have the option of declining their participation in the SSP before the first payroll deferral is made. The TRS Board has the authority to increase the minimum compensation deferral.

COVID-19 Paid Administrative Leave — Public Act 102-697

For TRS members who used sick time during the 2020-21 school year to deal with the coronavirus, the new law requires school districts to replace any “sick time” used for that purpose with “COVID-19 administrative leave time.” The sick time would be added back to a member’s accumulated sick leave “bank.”

Accelerated Benefit Program Extension — Public Act 102-718

Authorizes state government to issue bonds up to $1 billion to fund payouts for the two public pension "accelerated benefit" programs. This bond authorization is in addition to the initial $1 billion signed into law at the inception of the buyout programs. The public act authorizing the additional $1 billion also extends the "buyout" program sunset from 2024 to 2026.

Post Retirement Work Limits — Public Act 102-709

Expands the number of days during the 2021-2022 school year that retired TRS members could have taught full-time without that service negatively affecting their pensions. The former limits of 120 days or 600 hours were increased to 140 days or 700 hours.

The following new laws are designed to help ease the current classroom teacher shortage in Illinois by simplifying the path to a teacher’s license or a position in the classroom. These laws affect TRS because changes to licensure requirements may boost the number of active TRS members.

Teaching License Reinstatement — Public Act 102-0710

Reduces the fee inactive educators must pay to reinstate a lapsed teaching license from the State Board of Education to $50. The old fee was $500.

Substitute Teaching Licenses — Public Act 102-0711

Will allow currently-enrolled college education majors to obtain a substitute teaching license. To be eligible, students must have completed 90 or more credit hours. Under current law, candidates for substitute teaching licenses must hold a bachelor’s degree or higher. The new law is effective on January 1, 2023.

A six-horse hitch at the Whiteside County Fair.

Whiteside County Fair

Founded in 1872, the Whiteside County Fair is dedicated to showcasing the agricultural, horticultural, floricultural and mechanical industries and services throughout the region, with an emphasis on youth education. With fewer family farms in operation, organizers say the county fair may be the only time that kids — and adults — are exposed to the wonders of rural farms. Approximately 20,000 people visit the fair each year.

FINANCIAL STATEMENTS
TEACHERS' RETIREMENT SYSTEM OF THE STATE OF ILLINOIS
STATEMENT OF FIDUCIARY NET POSITION
JUNE 30, 2022

	Defined Benefit Pension Plan	Deferred Compensation Custodial Fund	Total
Assets			
Cash	$19,555,845	$26	$19,555,871
Receivables and prepaid expenses:			
Member contributions	111,156,404	23,415	111,179,819
Participant DC fees	-	3,029	3,029
Employer contributions	14,122,831	91	14,122,922
State of Illinois	379,510	-	379,510
Investment income	208,865,252	-	208,865,252
Other receivables	1,796,573	-	1,796,573
Pending investment sales	4,954,586,143	-	4,954,586,143
Prepaid expenses	-	-	-
Total receivables and prepaid expenses	5,290,906,713	26,535	5,290,933,248
Investments, at fair value:			
Fixed income	8,729,837,455	-	8,729,837,455
Public equities	20,060,816,480	-	20,060,816,480
Alternative investments	32,685,826,413	-	32,685,826,413
Derivatives	(4,884,136)	-	(4,884,136)
Short-term investments	959,097,903	-	959,097,903
Foreign currency	97,615,510	-	97,615,510
Total investments	62,528,309,625	-	62,528,309,625
Invested securities lending collateral:			
Securities lending collateral	2,162,401,100	-	2,162,401,100
Securities lending collateral with the State Treasurer	21,502,000	-	21,502,000
Total invested securities lending collateral	2,183,903,100	-	2,183,903,100
Capital assets, net of accumulated depreciation	8,238,075	-	8,238,075
Total assets	70,030,913,358	26,561	70,030,939,919
Liabilities			
Administrative expenses payable	3,532,274	1,796,573	5,328,847
Benefits and refunds payable	7,896,219	-	7,896,219
Investment expenses payable	95,534,960	-	95,534,960
Pending investment purchases	4,906,430,051	-	4,906,430,051
Securities lending collateral	2,183,893,515	-	2,183,893,515
Third-party administrator payable	-	22,144	22,144
Total liabilities	7,197,287,019	1,818,717	7,199,105,736
Total fiduciary net position (deficit) restricted for pensions and other benefits	$62,833,626,339	($1,792,156)	$62,831,834,183

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, 2022

	Defined Benefit Pension Plan	Deferred Compensation Custodial Fund	Total
Additions			
Contributions:			
Members	$1,072,639,330	$722,477	$1,073,361,807
State of Illinois	5,866,799,836	-	5,866,799,836
Employers			
Federal funds	44,470,352	-	44,470,352
2.2 benefit formula	67,679,341	-	67,679,341
Excess employer costs	8,726,877	-	8,726,877
Employer SSP	-	335	335
Total contributions	7,060,315,736	722,812	7,061,038,548
Investment income:			
Net decrease in fair value of investments	(1,822,405,587)	-	(1,822,405,587)
Alternatives income	1,100,265,053	-	1,100,265,053
Interest and dividends	913,528,907	-	913,528,907
Other investment income	4,644,932	-	4,644,932
Securities lending income	8,460,584	-	8,460,584
Less investment expenses:			
Alternatives expense	476,452,397	-	476,452,397
Direct investment expense	470,576,250	-	470,576,250
Securities lending management fees	507,615	-	507,615
Net investment decrease	(743,042,373)	-	(743,042,373)
Other income			
Participant fees	-	3,029	3,029
Total other income	-	3,029	3,029
Total additions	6,317,273,363	725,841	6,317,999,204
Deductions			
Retirement benefits	7,188,187,839	-	7,188,187,839
Survivor benefits	386,984,571	-	386,984,571
Disability benefits	31,847,092	-	31,847,092
Refunds	62,556,744	-	62,556,744
Contributions sent to third-party administrator	-	721,424	721,424
Administrative expenses	26,575,798	1,796,573	28,372,371
Total deductions	7,696,152,044	2,517,997	7,698,670,041
Net decrease in net position	(1,378,878,681)	(1,792,156)	(1,380,670,837)
Total fiduciary net position			
Beginning of year	64,212,505,020	-	64,212,505,020
End of year (deficit)	$62,833,626,339	($1,792,156)	$62,831,834,183

See accompanying Notes to Financial Statements.

NOTES TO FINANCIAL STATEMENTS

A. PLAN DESCRIPTIONS

1. Reporting Entity

a. Defined Benefit Plan

The Teachers' Retirement System of the State of Illinois (TRS) is a public employee retirement system (PERS), that administers a cost-sharing, multiple-employer defined benefit pension plan. That pension plan is a fiduciary component unit of TRS. 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.

b. Deferred Compensation Plan

TRS also administers a deferred compensation plan. Pursuant to Section 16-204 of the Illinois Pension Code, the Board of Trustees of TRS established the TRS Supplemental Savings Plan (SSP). The SSP is an eligible deferred compensation plan (DCP) under Section 457(b) of the Internal Revenue Code. Membership is voluntary for eligible TRS members. TRS uses a third-party administrator and acts as a pass-through entity for contributions received, thus assets are not controlled by TRS. The assets of the SSP are maintained under a trust for the exclusive benefit of participants and beneficiaries. Participating members, not TRS, direct the third-party administrator regarding use, exchange or employment of assets within their own accounts. The SSP is not a component unit of TRS but a custodial fund reporting fiduciary activities.

The net position deficit is a result of start-up expenses and technology costs expended in order to develop and implement a new SSP. The deficit will be eliminated in future years as SSP participants join and start paying fees which will offset plan costs.

TRS uses criteria established by the Governmental Accounting Standards Board (GASB) to determine whether other entities should be included within its financial reporting entity.

2. Employers

Members of TRS are employed by school districts, special districts, certain state agencies and certain non-governmental entities. Each employer remits member contributions to TRS.

Employers are responsible for employer contributions for:

- Teachers paid from federal funds.
- The 2.2 formula increase.
- Salary increases in excess of 6 percent. When a member retires, the employer is required to pay TRS contributions equal to the actuarial value of a pension benefit that results from any salary increase over 6 percent that is used in a retiring member's final average salary calculation. Several permanent exemptions are in effect for excess salary increases.
- Sick leave days received in excess of the normal annual allotment and applied to service credit for members in their final four years prior to retirement.
- Any portion of a member's salary that is greater than the governor's statutory 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)

	2022
Local school districts	851
Special districts	132
State agencies	9
Total	992

3. Members

TRS Membership (as of June 30)

	2022
Retirees and beneficiaries	129,466
Inactive members	144,801
Active members	165,566
Total	**439,833**

4. Board of Trustees

TRS is governed by a 15-member Board of Trustees. Trustees include the state superintendent of education, seven trustees appointed by the governor, five trustees elected by contributing TRS members, and two trustees elected by TRS annuitants. The president of the Board of Trustees, by law, is appointed by the governor from among the sitting trustees. The Board of Trustees elects its vice president from among its members. The Board of Trustees appoints an executive director who also serves as the secretary of the Board of Trustees. The executive director is responsible for daily operations at TRS.

5. Benefit Provisions

a. Defined Benefit Plan

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 (Act), 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 annual salary rates within the last 10 years of creditable service with one exception. Public Act 102-0016 removes the consecutive years requirement for members who are retiring on or after June 1, 2021 and the 2020-21 school year is used in the member's final average salary. The final average salary will be based on the four highest years within the last 10 years of creditable service.

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 member's highest average salary earned during eight consecutive years out of the last 10 years of service with one exception. Public Act 102-0016 removes the consecutive years requirement for members who are retiring on or after June 1, 2021 and the 2020-21 school year is used in the member's final average salary. The final average salary will be based on the eight highest years within the last 10 years of creditable service.

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

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

Under the law, Tier 3 members would 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. In addition, Tier 3 members would contribute a minimum of 4 percent of their pay to the DC portion of the plan.

At retirement, TRS members would receive a pension and be able to access funds from their DC savings account as they see fit.

However, an implementation date for Tier 3 has not been set. As written, the current language of the Tier 3 statute inadvertently conflicts with other provisions of the Illinois Pension Code. Until these differences are corrected by the legislative and executive branches, Tier 3 cannot be implemented.

b. Deferred Compensation Plan

The Deferred Compensation Plan provides retirement benefits to participating members. All contributions are held in Trust for the exclusive benefit of participants and beneficiaries. Participants are always 100 percent vested in all contributions and investment earnings (including employer contributions and related investment earnings), regardless of years of service credit attained. Participant is not entitled to a distribution of his/her accounts under the Plan until the earlier of the Participant's severance from employment or the calendar year in which the Participant attains age 59 and one half (59 ½). Exceptions to distribution restrictions rules include death, disability and unforeseeable financial emergency.

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, 2022 actuarial valuation were used to calculate the June 30, 2022 total pension liability. These assumptions were based on the latest experience study conducted by TRS actuaries, as discussed later in this section.

As of June 30, 2022, the assumption for future investment returns was 7.0 percent, a rate unchanged from June 30, 2021. However, the components which make up the investment return assumption, real rate of return and inflation, were changed from 4.75 percent and 2.25 percent to 4.50 percent and 2.50 percent, respectively. The investment return assumption for the 2022 actuarial valuation is based on an asset allocation study conducted by the TRS investment consultant and additional analysis conducted by the actuary in 2022.

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	Return	Allocation
U.S. equities large cap	5.7%	16.3%
U.S. equities small/mid cap	6.8	1.9
International equities developed	6.6	14.1
Emerging market equities	8.6	4.7
U.S. bonds core	1.2	6.9
International debt developed	0.3	1.2
International debt emerging	3.8	3.7
Cash equivalents	(0.3)	1.2
TIPS	0.3	0.5
Real estate	5.4	16.0
Hedge funds (absolute return)	3.5	4.0
Infrastructure	5.9	2.0
Private equity	10.0	15.0
Private debt	5.3	12.5

If the plan's fiduciary net position is 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, 2022, 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, 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, 100-0587, 101-0010 and 102-0718. 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 $5.9 billion in FY23 and grow to $10.3 billion by FY45 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, 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, 2022 measurement date based on census data as of June 30, 2021. Assets, included in plan fiduciary net position, are measured at fair value.

Net Pension Liability

	June 30, 2022
Total pension liability	$146,673,960,220
Plan fiduciary net position	62,833,626,339
Net pension liability	$83,840,333,881
Plan fiduciary net position as a percentage of the total pension liability	42.8%

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	$102,537,471,806	$83,840,333,881	$68,336,030,930

Most of the actuarial assumptions used in the June 30, 2022 actuarial valuation are based on the actuarial experience analysis dated September 2021 that covered the period July 1, 2017 through June 30, 2020 and the economic experience review presented at the Aug. 11, 2022 Board meeting.

Actuarial Assumptions Used for Financial Reporting Disclosure

Actuarial Valuation Date	June 30, 2022
Census Date:	June 30, 2021 with total pension liability projected to June 30, 2022
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, 2022
Real rate of investment return	4.50%
Projected salary increases	8.75% with 1 year of service to 3.75% with 20 or more years of service. Includes inflation and real wage growth (productivity) assumptions.
Group size growth rate	0%
Assumed inflation rate	2.50%
Post-retirement increase	Tier 1: 3%, compounded; Tier 2: 1.25%, not compounded
Mortality table:	PubT - 2010 adjusted for TRS experience with future mortality improvements on a fully generational basis using projection table MP-2020.

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 additions when due pursuant to statutory or contractual requirements. Benefits and refunds are recognized as deductions 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.

As a result of the spread of the SARS-CoV-2 virus and the incidence of COVID-19, economic uncertainties have arisen which may negatively affect the fiduciary net position of the System. The duration of these uncertainties and the ultimate financial effects cannot be reasonably estimated at this time.

4. New Accounting Pronouncements

The newly established Deferred Compensation Plan started accepting contributions in March 2022. Under GASB Statement No. 84, "Fiduciary Activities," the Deferred Compensation Plan will be reported not as a component unit of TRS but as a custodial fund reporting fiduciary activities. Aspects of the plan that have been assigned to a third-party administrator are not included in TRS financial reporting per governmental accounting standards.

Effective for fiscal year 2022, GASB Statement No. 87, “Leases” establishes a single model for lease accounting based on the principle that leases are financings of the right to use an asset. There is no longer an operating vs. capital classification. Lessees will recognize a lease liability and an intangible right-to-use asset, and lessors will recognize a lease receivable and a deferred inflow of resources. TRS implemented the provisions of GASB 87 for the year ended June 30, 2022. This had an immaterial impact.

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 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 most 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, diversifying funds and partnership interests in real estate and real assets 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, 2022 was as follows:

	Beginning Balance	Additions/ Transfers In	Disposals/ Transfers Out	Ending Balance
Capital Assets, not depreciated:				
Land	$235,534	$ -	$ -	$235,534
Mineral Lease Rights	2,643	-	-	2,643
	238,177	-	-	238,177
Capital Assets, depreciated:				
Office building	9,307,065	340,988	-	9,648,053
Site improvements	1,127,708	-	-	1,127,708
Equipment and furniture	3,237,643	118,005	38,921	3,316,727
Purchased Software	295,045	-	-	295,045
Internally Generated Software (IGS)	10,107,826	1,569,967	-	11,677,793
	24,075,287	2,028,960	38,921	26,065,326
Less accumulated depreciation:				
Office building	7,968,257	215,004	-	8,183,261
Site improvements	1,031,672	69,261	-	1,100,933
Equipment and furniture	2,912,464	143,093	38,815	3,016,742
Purchased Software	295,045	-	-	295,045
Internally Generated Software (IGS)	3,652,101	1,817,346	-	5,469,447
	15,859,539	2,244,704	38,815	18,065,428
Total Net Capital Assets	**$8,453,925**	**($215,744)**	**$106**	**$8,238,075**

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, 2022, the System had a liability of $2,167,568 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, 2022 was as follows:

	Beginning Balance	Additions	Reductions	Ending Balance
Compensated absences payable	$2,272,713	$1,249,531	$1,354,676	$2,167,568

The estimated amount due within one year is: $29,491

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 $19,555,845 at June 30, 2022. Of the bank balance, $19,556,897 was on deposit with the State Treasurer at June 30, 2022. 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 consisting of bank-sponsored, short-term investment funds, commercial paper, and certificates of deposit are reported 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 $886,920,530 at June 30, 2022. The STIF fund has an average credit quality rating of A1P1 and a weighted average maturity of 11.0 days.

For purposes of this disclosure, foreign currency held by investment managers is considered a deposit. However, for financial statement presentation and investment purposes, TRS considers foreign currency an investment asset. Uncollateralized foreign currency subject to custodial credit risk was $97,615,510 at June 30, 2022.

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, 2022.

Long-term Asset Allocation Policy Mix	
Equity	52%
Real assets	18
Diversifying strategies	4
Income	26
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 with a minimal quality S&P rating of B- or Moody's equivalent rating of B3. 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, 2022, 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	$143,285,832	$7,947,467	$502,592	$1,705,298	$93,593,103	$ -	$145,273,581	$392,307,873
Aa1	1,987,384	-	1,027,059	-	-	-	827,283,024	830,297,467
Aa2	1,628,912	7,451,623	41,567,242	-	-	-	-	50,647,777
Aa3	8,235,823	10,907,765	80,331,086	-	-	1,946,445	8,612,931	110,034,050
A1	183,842,581	1,012,689	188,287,157	-	-	-	-	373,142,427
A2	412,516,841	1,175,761	65,163,397	-	-	-	1,424,659,035	1,903,515,034
A3	242,055,591	3,302,644	78,035,804	-	-	-	305,842,890	629,236,929
Baa1	102,157,328	4,266,300	222,251,261	-	-	-	67,286,079	395,960,968
Baa2	251,521,654	8,162,302	488,352,936	-	-	-	-	748,036,892
Baa3	465,997,935	3,142,244	235,083,665	-	-	-	-	704,223,844
Ba1	107,082,566	-	95,989,813	-	-	1,683,304	-	204,755,683
Ba2	107,001,387	4,856,284	340,755,421	-	-	-	-	452,613,092
Ba3	123,736,491	958,180	239,320,627	-	-	-	1,241,923	365,257,221
B1	78,921,653	-	113,336,287	-	-	-	-	192,257,940
B2	27,205,333	-	143,392,228	-	-	-	-	170,597,561
B3	47,476,996	-	77,035,692	-	-	-	-	124,512,688
Caa1	18,110,164	-	69,101,177	-	-	-	-	87,211,341
Caa2	-	-	23,741,682	-	-	-	-	23,741,682
Caa3	1,803,644	-	8,896,607	-	-	-	-	10,700,251
Ca	243,124	1,370,615	5,923,655	-	-	-	-	7,537,394
C	-	51,144	13,710,687	-	-	-	-	13,761,831
Not rated	27,569,359	11,013,107	36,401,076	-	-	25,345	-	75,008,887
Withdrawn	2,964,452	44,084	8,835,737	-	-	-	-	11,844,273
Total credit risk, bonds, corporate notes and government obligations	**2,355,345,050**	**65,662,209**	**2,577,042,888**	**1,705,298**	**93,593,103**	**3,655,094**	**2,780,199,463**	**7,877,203,105**
U.S. Treasuries								852,634,350
Total bonds, corporate notes & government obligations	**$2,355,345,050**	**$65,662,209**	**$2,577,042,888**	**$1,705,298**	**$93,593,103**	**$3,655,094**	**$2,780,199,463**	**$8,729,837,455**

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, 2022 is as follows:

		Maturity in Years				
Type	**2022 Fair Value**	**Less Than 1 year**	**1 to 5 years**	**5 to 10 years**	**10 to 20 years**	**More Than 20 years**
U.S. treasuries/agencies	$854,339,648	$160,515,110	$624,548,331	$30,128,344	$24,791,281	$14,356,582
U.S. government-backed mortgages	93,593,103	69,793	474,838	-	53,011,371	40,037,101
Municipals	3,655,094	-	-	573,935	1,134,714	1,946,445
Asset-backed securities	65,662,209	-	21,143,070	20,023,690	7,898,960	16,596,489
Commingled funds (U.S. & international)*	2,780,199,463	786,208,756	353,513,925	1,286,363,305	103,662,298	250,451,179
Corporate debt securities	2,355,345,050	169,869,746	1,347,333,189	524,778,817	128,861,009	184,502,289
Foreign debt/corporate obligations	2,577,042,888	60,868,753	856,888,722	961,537,746	406,463,847	291,283,820
Total bonds, corporate notes and government obligations	**8,729,837,455**	**1,177,532,158**	**3,203,902,075**	**2,823,405,837**	**725,823,480**	**799,173,905**
Derivatives	(4,884,136)	(2,680,400)	2,918,564	(5,122,300)	-	-
Total bonds, corporate notes, government obligations, securities lending collateral and derivatives	**$8,724,953,319**	**$1,174,851,758**	**$3,206,820,639**	**$2,818,283,537**	**$725,823,480**	**$799,173,905**

** 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, 2022 is as follows:

Currency	Foreign Currency	Equities	Fixed Income	Derivatives	Total
Argentine Peso	$3	$ -	$ -	$ -	$3
Australian Dollar	3,456,366	373,779,582	-	-	377,235,948
Brazilian Real	5,879,613	142,373,150	109,175,091	(1,910,990)	255,516,864
British Pound	8,727,229	895,786,623	77,118	-	904,590,970
Canadian Dollar	6,689,080	569,480,652	-	-	576,169,732
Chilean Peso	603,153	8,638,912	14,297,173	(230,637)	23,308,601
Chinese Yuan	18,407,004	-	-	-	18,407,004
Chinese Yuan Renminbi	(17,750,624)	250,044,265	37,475,835	-	269,769,476
Colombia Peso	276,184	589,481	37,470,338	(492,079)	37,843,924
Czech Koruna	758,053	6,861,277	22,760,487	(2,833,731)	27,546,086
Danish Krone	1,685,067	172,379,472	-	-	174,064,539
Dominican Peso	-	-	284,867	-	284,867
Egyptian Pound	(211,773)	5,538,535	3,043,903	-	8,370,665
Emirati Dirham	51,443	30,016,163	-	-	30,067,606
Euro	26,383,550	1,742,829,243	35,074,415	-	1,804,287,208
Hong Kong Dollar	4,501,317	562,878,920	-	-	567,380,237
Hungarian Forint	618,574	11,839,923	24,594,121	450,164	37,502,782
Indian Rupee	298,513	281,992,149	239	-	282,290,901
Indonesian Rupiah	1,847,299	93,522,083	74,880,144	-	170,249,526
Israeli Shekel	322,784	44,296,842	-	30,857	44,650,483
Japanese Yen	15,546,379	1,198,961,789	-	-	1,214,508,168
Kuwati Dinar	2,441	1,427,479	-	-	1,429,920
Malaysian Ringgit	829,529	37,680,499	45,241,763	(270,042)	83,481,749
Mexican Peso	3,352,107	66,080,307	93,224,670	(749,762)	161,907,322
New Taiwan Dollar	805,584	325,066,176	-	(1,213,519)	324,658,241
New Zealand Dollar	90,480	4,960,967	-	-	5,051,447
Nigerian Naira	985,704	-	-	-	985,704
Norwegian Krone	985,785	60,862,912	-	-	61,848,697
Pakistani Rupee	46,490	461,452	-	-	507,942
Peruvian Sol	13,458	382,037	29,892,857	-	30,288,352
Philippine Peso	190,409	10,396,137	-	-	10,586,546
Polish Zloty	2,328,148	45,152,886	36,060,789	3,972,681	87,514,504
Qatari Riyal	586,573	21,290,497	-	-	21,877,070
Romanian Leu	206,176	-	10,399,298	-	10,605,474
Russian Ruble	2,086,056	-	1,427,455	-	3,513,511
Singapore Dollar	872,331	78,040,361	-	277,002	79,189,694
South African Rand	146,233	75,352,961	90,911,669	(700,573)	165,710,290
South Korean Won	20,484	355,742,706	-	(1,487,157)	354,276,033
Swedish Krona	2,657,354	193,559,314	-	-	196,216,668
Swiss Franc	2,153,787	525,557,333	-	-	527,711,120
Thailand Baht	612,129	105,681,612	47,720,826	(238,897)	153,775,670
Turkish Lira	161,910	15,095,840	502,592	-	15,760,342
Ukraine Hryvnia	197,222	-	-	-	197,222
Uruguayan Peso	195,906	-	5,206,038	-	5,401,944
Vietnam Dong	-	2,547,819	-	-	2,547,819
Uzbekistani Som	-	-	626,567	-	626,567
Zambian Kwacha	-	-	5,132,065	-	5,132,065
Total subject to foreign currency risk	**97,615,510**	**8,317,148,356**	**725,480,320**	**(5,396,683)**	**9,134,847,503**
Investments in international securities payable in U.S. dollars	-	800,266,892	1,851,562,568	336,511	2,652,165,971
Total international investment securities (including domestic securities payable in foreign currency)	**97,615,510**	**9,117,415,248**	**2,577,042,888**	**(5,060,172)**	**11,787,013,474**
Domestic investments (excluding securities payable in foreign currency)	-	10,943,401,232	6,152,794,567	176,036	17,096,371,835
Total fair value	**$97,615,510**	**$20,060,816,480**	**$8,729,837,455**	**($4,884,136)**	**$28,883,385,309**

In addition to the previous table, the fair value of TRS's investments in foreign currency denominated real asset, private credit and private equity funds was $444,700,980, $26,579,564 and $655,114,550 at June 30, 2022, respectively. Currencies included Euro, British pound, Canadian dollar, 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, 2022, Citibank, N.A. served as the third-party securities lending agent for the fixed income, domestic equity, international equity and global 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 seven 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, but as of June 30, 2022, 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 53 days at June 30, 2022. 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, 2022, TRS had outstanding loaned investment securities with a fair value of $2,160,536,130 against which it had received cash and non-cash collateral with a fair value of $2,218,363,489. The securities on loan remain on TRS's Statement of Fiduciary Net Position in their respective investment categories. As of June 30, 2022, TRS cash collateral received and reported as securities lending obligation on the Statement of Fiduciary Net Position totaled $2,162,391,515; whereas, the fair value of reinvested cash collateral reported as securities lending collateral was $2,162,401,100. 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 reinvested 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.illinoistreasurer.gov**.

Income earned and costs related to securities lending activities are reported on the Statement of Changes in Fiduciary Net Position. For FY22, the System earned net income of $7,952,969 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 and derivative positions of the investment managers are reviewed on a regular basis to monitor compliance.

As of June 30, 2022, 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, 2022, the TRS investment portfolio held the following derivatives.

Investment Derivatives	Fair Value at June 30, 2022	Change in Fair Value	Shares/Par	Notional
Credit default swaps buying protection	$2,382,527	$10,238,601	256,212,146	$253,690,048
Credit default swaps selling protection	(1,271,446)	(457,089)	15,310,000	14,042,836
Index and variance swaps	(3,051,947)	(9,959,653)	(31,798,199)	23,900,824
Pay fixed interest rate/inflation swaps	10,972,399	30,231,918	272,472,758	273,910,053
Receive fixed interest rate/inflation swaps	(14,287,216)	(28,519,549)	439,651,639	426,294,082
Equity futures long	-	(13,156,390)	714,314	75,417,466
Equity futures short	-	3,249,463	(45,160)	(16,978,995)
Fixed income futures long	-	(21,416,630)	182,904,545	221,315,965
Fixed income futures short	-	15,596,150	(39,083,823)	(51,392,352)
Currency forward options purchased	1,508,791	3,129,478	215,047,263	145,946,469
Currency forward options written	(1,206,724)	(2,532,539)	(204,076,889)	50,907,121
Options on futures purchased	-	(633,571)	-	-
Swaptions purchased	91,188	(1,351,594)	86,500,000	4,411,500
Swaptions written	(21,708)	753,834	(86,500,000)	821,750
FX forwards	1,328,389	14,224,620	-	-
Rights	196	378,996	2,242	2,242
Warrants	14,030,851	1,128,924	1,822,943	1,822,943
Grand total	**$10,475,300**	**$904,969**		**$1,424,111,952**

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, 2022, TRS had currency forward purchase or sale contracts for 33 different currencies with various settlement dates.

Fair Value: As of June 30, 2022, TRS's open currency forward contracts had a net fair value (unrealized gain) of $1,328,389.

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, 2022, TRS had outstanding futures contracts with a notional value, or exposure, of $228,362,084. Notional values do not represent the actual values in the Statement of Fiduciary Net Position. The contracts have various expiration dates through September 2022.

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 $15,241,464 during FY22.

Type	Number of Contracts	Notional Principal
Equity Futures		
International equity index futures - long	1,401	$75,417,466
International equity index futures - short	(700)	(16,978,995)
Fixed Income/Cash Equivalent Futures		
Fixed income index futures – long	1,547	221,201,860
Fixed income index futures – short	(175)	(21,305,594)
International fixed income index futures - long	1	114,105
International fixed income index futures – short	(205)	(30,086,758)

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, 2022, the TRS investment portfolio held currency forward options with notional value of $196,853,590. Contractual principal/notional values do not represent the actual values in the Statement of Fiduciary Net Position. The contracts have various expiration dates through October 2022.

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, 2022, the fair value of all option contracts, gross of premiums received, was $302,067. 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, 2022. 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 call options - purchased	7	$38,851,186
Currency forward call options - written	4	11,888,837
Currency forward put options - purchased	11	107,095,283
Currency forward put options - written	13	39,018,284

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. 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.

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, 2022, TRS had outstanding written call swaption exposure of $821,750 and purchased call swaption exposure of $4,411,500.

The contracts have various maturity dates through September 2022. 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, 2022, the fair value of swaption contracts was $69,480.

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, 2022, TRS had credit default/index swaps in its portfolio with various maturity dates through June 2027. The notional values as of June 30, 2022, included purchased credit default swaps (buying protection) of $253,690,048, written credit default swaps (selling protection) of $14,042,836 and index swaps of $23,900,824.

Fair Value: The fair value of credit default swaps, including index swaps, held by TRS was ($1,940,866) as of June 30, 2022. This represents the amount due to or (from) TRS under the terms of the counterparty agreements.

Interest Rate/Inflation 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. 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, 2022, TRS held interest rate swaps in various currencies with various expiration/maturity dates ranging from 2023 to 2032. 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 at right presents the fair value of TRS's interest rate swap exposure as of June 30, 2022.

	As of June 30, 2022
Receive floating/pay fixed	$10,972,399
Receive fixed/pay floating	(14,287,216)

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, 2022.

Asset Description	Par	Gross Notional	TRS Receives	TRS Pays	Maturity Date	Fair Value 6/30/22
Pay Fixed Interest Rate/Inflation Swaps:						
Interest Rate Swap PLN	22,450,000	$5,053,005	6 month WIBOR	1.35%	10/5/2023	$368,117
Interest Rate Swap PLN	22,450,000	5,053,005	6 month WIBOR	1.38	10/5/2023	365,761
Interest Rate Swap PLN	22,865,000	5,101,296	6 month WIBOR	2.40	12/15/2023	321,670
Interest Rate Swap CLP	12,318,740,000	13,155,559	6 month Chile Interbank Rate	8.25	6/29/2024	40,613
Interest Rate Swap BRL	6,322,091	1,208,940	3 month Brazilian CDI	8.25	1/2/2025	89,330
Interest Rate Swap BRL	20,170,845	3,857,164	3 month Brazilian CDI	8.14	1/2/2025	298,572
Interest Rate Swap BRL	25,241,859	4,826,867	3 month Brazilian CDI	9.07	1/2/2025	313,988
Interest Rate Swap PLN	31,340,000	7,065,410	6 month WIBOR	4.30	2/1/2025	478,536
Interest Rate Swap CLP	2,602,000,000	2,782,982	6 month Chile Interbank Rate	3.17	6/23/2026	381,423
Interest Rate Swap HUF	1,021,120,000	2,735,333	6 month BUBOR	2.66	9/3/2026	536,385
Interest Rate Swap PLN	18,190,000	4,097,697	6 month WIBOR	1.57	9/3/2026	755,113
Interest Rate Swap ZAR	52,314,000	3,200,180	3 month JIBAR	6.86	12/15/2026	139,635
Interest Rate Swap BRL	7,224,767	1,381,554	3 month Brazilian CDI	7.11	1/4/2027	211,754
Interest Rate Swap BRL	8,383,132	1,603,062	3 month Brazilian CDI	7.75	1/4/2027	208,489
Interest Rate Swap BRL	8,767,456	1,978,436	3 month Brazilian CDI	8.39	1/4/2027	301,882
Interest Rate Swap BRL	8,923,788	1,706,449	3 month Brazilian CDI	9.30	1/4/2027	146,093
Interest Rate Swap BRL	84,653,591	16,187,857	3 month Brazilian CDI	11.09	1/4/2027	605,674
Interest Rate Swap BRL	38,348,830	7,333,243	3 month Brazilian CDI	12.00	1/4/2027	92,681
Interest Rate Swap BRL	38,470,113	7,356,436	3 month Brazilian CDI	12.22	1/4/2027	50,122
Interest Rate Swap BRL	37,412,105	7,154,119	3 month Brazilian CDI	12.27	1/4/2027	43,322
Interest Rate Swap BRL	28,639,433	5,476,567	3 month Brazilian CDI	12.36	1/4/2027	19,717
Interest Rate Swap BRL	43,858,699	8,386,866	3 month Brazilian CDI	12.04	1/4/2027	91,280
Interest Rate Swap BRL	29,349,868	5,612,420	3 month Brazilian CDI	12.81	1/4/2027	(42,452)
Interest Rate Swap CLP	1,968,940,000	2,168,043	6 month Chile Interbank Rate	5.63	1/10/2027	117,035
Interest Rate Swap COP	4,845,670,000	1,164,517	3 Month IBRCO	6.85	1/12/2027	97,112
Interest Rate Swap COP	14,271,000,000	3,429,622	3 Month IBRCO	7.65	2/14/2027	188,936
Interest Rate Swap ZAR	385,687,000	23,843,685	3 month JIBAR	6.96	3/16/2027	1,043,864
Interest Rate Swap HUF	1,970,000,000	5,288,459	6 month BUBOR	6.25	3/17/2027	447,104
Interest Rate Swap PLN	72,750,000	16,371,889	6 month WIBOR	5.41	4/7/2027	879,419

(continued)

(continued)

Asset Description	Par	Gross Notional	TRS Receives	TRS Pays	Maturity Date	Fair Value 6/30/22
Interest Rate Swap MXN	2,608,000	$129,683	28 day Mexican TIIE	8.54%	6/9/2027	$2,257
Interest Rate Swap KRW	7,700,000,000	5,935,497	91 day CD-KSDA	2.41	6/15/2027	294,307
Interest Rate Swap PLN	56,922,913	12,699,786	6 month WIBOR	4.97	6/15/2027	993,424
Interest Rate Swap MXN	89,341,000	4,428,137	28 day Mexican TIIE	8.46	9/15/2027	98,458
Interest Rate Swap MXN	208,760,000	10,347,074	28 day Mexican TIIE	8.99	9/15/2027	14,315
Interest Rate Swap COP	15,597,200,000	3,748,336	3 Month IBRCO	9.20	9/21/2027	1,146
Interest Rate Swap PLN	78,314,188	17,419,217	6 month WIBOR	6.63	9/21/2027	146,328
Interest Rate Swap THB	446,210,000	12,620,846	12 month THOR	3.09	9/21/2027	(238,897)
Interest Rate Swap ZAR	329,020,000	20,083,626	3 month JIBAR	8.28	9/21/2027	107,074
Interest Rate Swap ZAR	25,164,000	1,550,970	3 month JIBAR	7.54	4/9/2031	119,772
Interest Rate Swap ZAR	60,660,000	3,737,858	3 month JIBAR	7.42	7/13/2031	332,061
Interest Rate Swap ZAR	45,070,000	2,752,606	3 month JIBAR	7.49	9/27/2031	259,256
Interest Rate Swap ZAR	46,795,000	2,886,476	3 month JIBAR	7.60	1/4/2032	239,326
Interest Rate Swap PLN	4,407,154	989,279	6 month WIBOR	6.41	5/10/2032	12,397
Total Pay Fixed Interest Rate/Inflation Swaps:		**$273,910,053**				**$10,972,399**
Receive Fixed Interest Rate/Inflation Swaps:						
Interest Rate Swap BRL	23,620,152	$3,947,886	4.59%	3 month Brazilian CDI	1/2/2024	($568,870)
Interest Rate Swap BRL	91,048,013	16,949,055	11.25	3 month Brazilian CDI	1/2/2024	(461,574)
Interest Rate Swap BRL	85,633,589	16,294,873	12.99	3 month Brazilian CDI	1/2/2024	(80,384)
Interest Rate Swap BRL	137,178,766	26,105,345	13.00	3 month Brazilian CDI	1/2/2024	(126,623)
Interest Rate Swap HUF	22,150,000,000	58,231,376	9.40	3 month BUBOR	6/27/2024	(128,752)
Interest Rate Swap PLN	15,800,000	3,202,186	1.80	6 month WIBOR	7/24/2024	(371,356)
Interest Rate Swap BRL	6,307,119	1,061,033	5.76	3 month Brazilian CDI	1/2/2025	(145,044)
Interest Rate Swap BRL	18,679,272	3,257,719	7.95	3 month Brazilian CDI	1/2/2025	(314,219)
Interest Rate Swap BRL	17,568,466	3,272,381	11.19	3 month Brazilian CDI	1/2/2025	(87,144)
Interest Rate Swap BRL	28,341,632	5,263,210	11.08	3 month Brazilian CDI	1/2/2025	(156,410)
Interest Rate Swap BRL	36,532,751	6,782,370	11.09	3 month Brazilian CDI	1/2/2025	(203,594)
Interest Rate Swap BRL	45,345,607	8,577,400	12.05	3 month Brazilian CDI	1/2/2025	(93,800)
Interest Rate Swap BRL	256,700,000	48,930,245	12.48	3 month Brazilian CDI	1/2/2025	(157,135)
Interest Rate Swap CLP	1,812,000,000	1,645,996	1.66	6 month Chile Interbank Rate	4/23/2025	(294,267)
Interest Rate Swap COP	13,845,650,000	2,837,702	3.67	3 Month IBRCO	5/7/2025	(489,700)
Interest Rate Swap ZAR	41,800,000	2,373,468	5.01	3 month JIBAR	6/25/2025	(180,119)
Interest Rate Swap CLP	2,334,600,000	2,182,517	3.51	6 month Chile Interbank Rate	7/12/2026	(350,656)
Interest Rate Swap CZK	69,720,000	2,661,248	2.36	6 month PRIBOR	9/22/2026	(339,954)
Interest Rate Swap BRL	9,106,785	1,473,729	6.53	3 month Brazilian CDI	1/4/2027	(267,713)
Interest Rate Swap BRL	6,617,719	1,058,371	6.33	3 month Brazilian CDI	1/4/2027	(207,100)

(continued)

(continued)

Asset Description	Par	Gross Notional	TRS Receives	TRS Pays	Maturity Date	Fair Value 6/30/22
Interest Rate Swap BRL	11,776,624	$1,855,506	6.13%	3 month Brazilian CDI	1/4/2027	($396,476)
Interest Rate Swap BRL	12,575,927	1,999,531	6.60	3 month Brazilian CDI	1/4/2027	(405,297)
Interest Rate Swap BRL	9,389,520	1,608,473	8.57	3 month Brazilian CDI	1/4/2027	(187,035)
Interest Rate Swap BRL	7,091,864	1,184,616	8.02	3 month Brazilian CDI	1/4/2027	(171,524)
Interest Rate Swap BRL	29,426,547	5,550,800	11.76	3 month Brazilian CDI	1/4/2027	(76,283)
Interest Rate Swap BRL	12,032,572	2,298,523	12.20	3 month Brazilian CDI	1/4/2027	(2,402)
Interest Rate Swap BRL	31,115,411	5,821,485	11.68	3 month Brazilian CDI	1/4/2027	(128,550)
Interest Rate Swap KRW	5,886,499,999	4,307,091	2.18	91 day CD-KSDA	1/7/2027	(249,619)
Interest Rate Swap ZAR	433,258,000	25,809,082	6.96	3 month JIBAR	3/16/2027	(1,172,615)
Interest Rate Swap MXN	185,690,000	9,175,936	8.80	28 day Mexican TIIE	6/9/2027	(63,691)
Interest Rate Swap COP	23,047,850,000	5,362,930	8.23	3 Month IBRCO	6/15/2027	(195,773)
Interest Rate Swap MXN	89,242,200	3,742,269	5.19	28 day Mexican TIIE	7/27/2027	(696,276)
Interest Rate Swap MXN	35,470,000	1,748,164	8.88	28 day Mexican TIIE	9/15/2027	(9,887)
Interest Rate Swap KRW	32,700,000,000	25,305,467	3.64	91 day CD-KSDA	9/21/2027	120,624
Interest Rate Swap MYR	76,900,000	17,354,631	3.82	3 month KLIBOR	9/21/2027	(92,902)
Interest Rate Swap MYR	35,120,000	7,903,796	3.76	3 month KLIBOR	9/21/2027	(64,440)
Interest Rate Swap MYR	52,000,000	11,695,597	3.74	3 month KLIBOR	9/21/2027	(102,474)
Interest Rate Swap MYR	35,110,000	7,900,262	3.75	3 month KLIBOR	9/21/2027	(65,705)
Interest Rate Swap MYR	54,000,000	12,307,322	4.03	3 month KLIBOR	9/21/2027	55,479
Interest Rate Swap ZAR	646,022,000	37,965,855	7.49	3 month JIBAR	9/21/2027	(1,467,809)
Interest Rate Swap BRL	5,966,502	925,524	6.78	3 month Brazilian CDI	1/2/2029	(215,418)
Interest Rate Swap CZK	72,475,000	2,353,635	1.61	6 month PRIBOR	1/27/2030	(730,619)
Interest Rate Swap CZK	71,960,000	2,318,020	1.52	6 month PRIBOR	1/29/2030	(743,028)
Interest Rate Swap HUF	938,520,000	2,068,211	1.96	6 month BUBOR	5/5/2030	(404,572)
Interest Rate Swap ZAR	25,164,000	1,440,386	7.53	3 month JIBAR	4/13/2031	(120,746)
Interest Rate Swap MXN	29,100,000	1,268,868	6.92	28 day Mexican TIIE	5/14/2031	(175,951)
Interest Rate Swap CZK	50,408,000	1,608,039	1.73	6 month PRIBOR	6/15/2031	(524,102)
Interest Rate Swap MXN	39,760,000	1,717,751	6.78	28 day Mexican TIIE	7/24/2031	(261,097)
Interest Rate Swap COP	2,683,430,000	551,084	6.65	3 Month IBRCO	11/9/2031	(93,801)
Interest Rate Swap CLP	1,567,600,000	1,549,456	5.38	6 month Chile Interbank Rate	12/27/2031	(124,784)
Interest Rate Swap CZK	92,885,000	3,487,662	3.45	6 month PRIBOR	1/27/2032	(496,029)
Total Receive Fixed Interest Rate/Inflation Swaps:		**$426,294,082**				**($14,287,216)**

BUBOR - *Budapest Interbank Offered Rate,* **CDI** - *Cetip Interbank Deposit (interbank lending rate),* **CD-KSDA** - *Certificates of Deposit, Korean Securities Dealer Assoc.,* **IBRCO** - *Colombia Interbank Rate,* **JIBAR** - *Johannesburg Interbank Average Rate,* **KLIBOR** - *Kuala Lumpur Interbank Offered Rate,* **PRIBOR** - *Prague Interbank Offered Rate,* **TIIE** - *Mexico Interbank Equilibrium Interest Rate,* **THOR -** *Thai Overnight Repurchase Rate***, WIBOR** - *Warsaw Interbank Offered 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, 2022, the aggregate fair value of non-exchange traded derivative instruments in asset positions was $69,217,125. All applicable futures, options and swaps are in compliance with Dodd-Frank requirements and cleared through the appropriate futures and swaps exchanges. The counterparty risk exposure below is primarily unsettled currency forward contracts. This represents the maximum loss that would be recognized at the reporting date if all counterparties failed to perform as contracted.

Counterparty Ratings for Non-Exchange Traded Derivatives

Quality Rating	Fair Value at June 30, 2022
Aa2	$4,513,451
Aa3	26,488,949
A1	20,446,972
A2	16,421,352
A3	1,274,008
Baa1	72,393
Total subject to credit risk	**$69,217,125**

Although the derivative instruments held within the TRS investment portfolio are executed with various counterparties, approximately 93 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, 2022, TRS had remaining unfunded commitments of $13,175,007,449 within the real estate, other real assets, private equity, diversifying strategies and global income asset classes.

6. Schedule of Investment Returns

For the year ended June 30, 2022, the annual money-weighted rate of return on pension plan investments, net of investment expense, was (1.2) 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 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 judgment 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 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 value.

The following table summarizes the valuation of TRS investments by the fair value hierarchy levels as of June 30, 2022.

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

		Fair Value Measurements Using		
Investments by fair value level	**June 30, 2022**	**Quoted Prices in Active Markets for Identical Assets Level 1**	**Significant Other Observable Inputs Level 2**	**Significant Unobservable Inputs Level 3**
Debt securities				
Asset-backed securities	$65,662	$ -	$65,662	$ -
Commercial/collateralized mortgages & loans	243,143	-	243,143	-
Domestic corporate obligations	2,112,202	-	2,112,202	-
Fixed income mutual funds	2,157,461	-	550,275	1,607,186
Foreign debt/corporate obligations	2,577,043	-	2,577,043	-
Municipals	3,655	-	3,655	-
U.S. agencies obligations	1,705	-	1,705	-
U.S. government-backed mortgages	93,593	-	93,593	-
U.S. treasuries	852,635	-	852,635	-
Total debt securities	**8,107,099**	**-**	**6,499,913**	**1,607,186**
Equity investments				
International common and preferred stock	9,106,048	9,086,555	19,493	-
U.S. common and preferred stock	10,954,768	10,954,661	107	-
Total equity investments	**20,060,816**	**20,041,216**	**19,600**	**-**
Real assets				
Real estate	5,721,952	-	-	5,721,952
Total real assets	**5,721,952**	**-**	**-**	**5,721,952**
Total investments by fair value level	**$33,889,867**	**$20,041,216**	**$6,519,513**	**$7,329,138**
Investments measured at the net asset value (NAV)				
Commingled fixed income funds	$622,738			
Diversifying strategies	4,447,346			
International equity commingled fund	-			
Private debt partnerships	5,685,030			
Private equity partnerships	10,195,515			
Private real estate partnerships	5,477,979			
Real asset partnerships	1,158,005			
Total investments measured at the NAV	**27,586,612**			
Total investments measured at fair value	**$61,476,480**			
Investment derivative instruments				
Credit default swaps	$1,111	$ -	$1,111	$ -
Index and variance swaps	(3,052)	-	(3,052)	-
Interest rate and inflation swaps	(3,315)	-	(3,315)	-
Options/swaptions	372	-	372	-
Total investment derivative instruments	**($4,884)**	**$ -**	**($4,884)**	**$ -**
Invested securities lending collateral				
Total invested securities lending collateral*	**$2,162,401**	**$324,359**	**$1,838,042**	**$ -**

** 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, 2022	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Commingled fixed income funds[1]	$622,738	$ -	Monthly, quarterly	30-45 days
Diversifying funds - liquid[2]	4,144,518	$83,813	Daily, weekly, monthly, quarterly	1-90 days
Diversifying funds - illiquid[3]	302,828	174,932	Not eligible	N/A
Total diversifying strategies	**4,447,346**	**258,745**		
Custom private debt partnerships	2,770,448	1,019,553	Quarterly	60-90 days
Private debt partnerships	2,914,581	2,831,052	Not eligible	N/A
Total private debt partnerships[4]	**5,685,029**	**3,850,605**		
Private equity partnerships[5]	10,195,515	5,217,231	Not eligible	N/A
Private real estate partnerships[5]	5,477,979	3,220,626	Not eligible	N/A
Real assets partnerships[6]	1,158,005	627,800	Not eligible	N/A
Total investments measured at the NAV	**$27,586,612**	**$13,175,007**		

1) **Commingled fixed income funds:** The investment strategies for the four fixed income funds include ESG, high yield, defensive bond arbitrage and global liquidity relative value. The fair value of the investments has been determined using the NAV per share (or its equivalent) of the investments. Liquidity is available monthly upon notice of redemption.
2) **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. Three factor portfolio direct investments include trend/momentum exposures and alternative risk premia. One risk parity investment focuses on optimizing Chinese beta. The systematic and discretionary macro strategies include direct investments in five funds diversifying through regional and product expertise, speed of algorithms and style of trading. Opportunistic funds, including six direct investments and one 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. Most strategies maintain a liquidity profile of less than one year, ranging from daily to quarterly and require advance notice prior to redemption.
3) **Diversifying funds (illiquid strategies):** The diversifying strategies asset class includes five 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 spans 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, 2022.

4) **Private debt partnerships:** Private debt funds consist of 66 funds investing across strategies such as stressed debt/credit, direct and specialty lending, real estate credit and global multi-credit strategies. Six of these funds are custom partnerships investing in opportunistic investments. The private debt 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 three to 12 years and distributions are received throughout the life of the fund. The custom partnerships allow TRS to liquidate upon giving advanced notice. TRS has no plans to liquidate as of June 30, 2022, and TRS did not sell any funds on the secondary market during the fiscal year. As of June 30, 2022, 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.

5) **Private equity and real estate partnerships:** TRS has 218 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 66 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 15 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 full or partial interest in nine private equity funds on the secondary market. As of June 30, 2022, 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.

6) **Real assets partnerships:** Real assets strategies include 11 limited partnerships investing in global infrastructure, direct energy, renewables, and non-U.S. agriculture. These partnerships are not eligible for redemption, considered illiquid and have an approximate life of six to 20 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, though two infrastructure funds were sold on the secondary market during the fiscal year. As of June 30, 2022, 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 additions at fair value, as opposed to book value, to the Benefit Trust Reserve.

1. Benefit Trust

	2022
Balances at June 30	$62,822,069,184

This reserve serves as a clearing account for TRS additions and deductions. 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 $80.6 billion in FY22 based on the actuarial value of assets.

2. Minimum Retirement Annuity

	2022
Balances at June 30	$11,557,155

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 *Annual Comprehensive Financial Report*. The System adopted GASB 75, but has chosen not to record the other post employment 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. Or, the GASB actuarial valuations can be found at **www.cgfa.ilga.gov** under the topic Group Insurance.

The iconic 128-year-old Exposition Building is the oldest facility on the Illinois State fairgrounds in Springfield.

Fairgoers have taken in the sights of the Illinois State Fair from the Sky Ride since 1933.

REQUIRED SUPPLEMENTARY INFORMATION

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

	2022	2021	2020	2019
Total pension liability				
Service cost	$2,097,274,410	$2,032,149,463	$1,991,622,987	$1,947,627,286
Interest	9,834,039,952	9,580,886,840	9,296,897,060	8,991,684,121
Changes of benefit terms	-	-	-	-
Difference between expected and actual experience	(260,304,587)	(370,469,646)	(28,215,833)	258,778,925
Change of assumptions	448,727,943	(162,359,084)	-	77,241,572
Benefit payments, including refund of member contributions	(7,669,576,246)	(7,388,142,712)	(7,099,524,955)	(6,818,760,572)
Net change in total pension liability	4,450,161,472	3,692,064,861	4,160,779,259	4,456,571,332
Total pension liability - beginning	142,223,798,748	138,531,733,887	134,370,954,628	129,914,383,296
Total pension liability - ending (a)	146,673,960,220	142,223,798,748	138,531,733,887	134,370,954,628
Plan fiduciary net position				
Contributions - employer	120,876,570	97,594,081	92,658,238	88,514,781
Contributions - nonemployer contributing entity	5,866,799,836	5,140,648,356	4,813,451,679	4,466,020,692
Contributions - member	1,072,639,330	1,023,531,951	994,400,416	963,972,120
Net investment income (loss)	(743,042,373)	13,046,153,685	275,669,398	2,617,831,332
Benefit payments, including refund of member contributions	(7,669,576,246)	(7,388,142,712)	(7,099,524,955)	(6,818,760,572)
Administrative expense	(26,575,798)	(23,758,112)	(22,966,372)	(24,335,680)
Net change in plan fiduciary net position	(1,378,878,681)	11,896,027,249	(946,311,596)	1,293,242,673
Plan fiduciary net position - beginning	64,212,505,020	52,316,477,771	53,262,789,367	51,969,546,694
Plan fiduciary net position - ending (b)	62,833,626,339	64,212,505,020	52,316,477,771	53,262,789,367
Employers' net pension liability - ending (a) - (b)	**$83,840,333,881**	**$78,011,293,728**	**$86,215,256,116**	**$81,108,165,261**

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 the Net Pension Liability for Fiscal Years:

	2022	2021	2020	2019
Total pension liability	$146,673,960,220	$142,223,798,748	$138,531,733,887	$134,370,954,628
Plan fiduciary net position	62,833,626,339	64,212,505,020	52,316,477,771	53,262,789,367
Net pension liability	**$83,840,333,881**	**$78,011,293,728**	**$86,215,256,116**	**$81,108,165,261**
Plan fiduciary net position as a percentage of the total pension liability	42.8%	45.1%	37.8%	39.6%
Covered payroll	$11,647,247,711	$11,120,776,122	$10,827,438,800	$10,450,452,444
Net pension liability as a percentage of covered payroll	719.8%	701.5%	796.3%	776.1%

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

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

Schedule of Investment Returns for Fiscal Years:

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expense	(1.2%)	25.4%	0.6%	5.1%	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)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Actuarially-determined contribution (ADC)	$8,947,919	$8,441,258	$7,988,612	$7,429,037	$7,080,756	$6,248,879	$4,582,530	$4,119,526	$4,091,978	$3,582,033
Contributions in relation to the actuarially-determined contribution:*										
State	5,866,530	5,140,337	4,813,078	4,465,578	4,094,616	3,985,783	3,741,802	3,376,878	3,437,478	2,702,278
Federal & Employer Contributions	120,441	97,082	92,038	87,707	84,034	148,749	147,408	144,780	157,228	155,787
Total contributions	5,986,971	5,237,419	4,905,116	4,553,285	4,178,650	4,134,532	3,889,210	3,521,658	3,594,706	2,858,065
Contribution deficiency	**$2,960,948**	**$3,203,839**	**$3,083,496**	**$2,875,752**	**$2,902,106**	**$2,114,347**	**$693,320**	**$597,868**	**$497,272**	**$723,968**
Covered payroll	$11,647,248	$11,120,776	$10,827,439	$10,450,452	$10,163,980	$9,965,570	$9,811,614	$9,641,171	$9,512,810	$9,394,741
Contributions as a percentage of covered payroll	51.4%	47.1%	45.3%	43.6%	41.1%	41.5%	39.6%	36.5%	37.8%	30.4%

** Contributions for minimum benefits from the state and for excess sick from employers do not count towards actuarial funding requirements. 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 following table. For FY22, the state contribution amount includes an additional one-time contribution of $173 million appropriated for TRS per Public Act 102-0696.*

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 FY22, the total pension liability increased by $4.5 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 FY22.

	For Funding per State Statute	For Determining the Actuarially-determined Contribution
Valuation Used to Determine Funding Amount:	June 30, 2020	June 30, 2020
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:	23 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 with five-year smoothing of investment gains and losses	Actuarial value of assets with five-year smoothing of investment gains and losses

OTHER SUPPLEMENTARY INFORMATION
SCHEDULE OF ADMINISTRATIVE EXPENSES
FOR THE YEARS ENDED JUNE 30

	2022	2021
Personnel services		
Salaries	$12,615,302	$10,924,264
Retirement contributions	1,734,781	1,867,608
Insurance and payroll taxes	4,560,695	4,238,772
	18,910,778	17,030,644
Professional services		
Actuarial services	162,225	239,646
External auditors	229,699	225,356
Legal services	283,682	611,753
Legislative consulting	84,000	84,000
Information systems consulting	2,519,746	613,471
Operations consulting	338,032	231,158
Other	23,139	12,229
	3,640,523	2,017,613
Communications		
Postage	215,229	84,780
Printing and copying	35,701	44,671
Telephone	132,339	127,544
	383,269	256,995
Other services		
Administrative services	353,549	286,886
Building operations and maintenance	422,932	469,960
EDP supplies and equipment	134,226	160,767
Equipment repairs, rental and maintenance	239,161	221,639
Insurance	447,821	288,652
Memberships and subscriptions	138,872	82,577
Office equipment and furniture	52,481	56,891
Office supplies	15,043	17,505
Software licenses and maintenance	1,299,437	1,034,575
Travel, conferences, education	89,575	39,286
	3,193,097	2,658,738
Depreciation expense	2,244,704	1,794,122
Total administrative expenses	**$28,372,371**	**$23,758,112**

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

	2022	2021
Investment manager fees	$449,288,368	$445,990,695
Master custodian fees		
State Street Bank and Trust Company	3,952,800	3,847,375
Investment consultants		
Aksia, L.L.C.	700,000	702,700
RVK, Inc.	465,000	465,000
Stepstone Group, L.P.	993,177	964,250
Stepstone Group Real Estate, L.P.	329,317	319,725
	2,487,494	2,451,675
Co-investment advisors		
Aksia TorreyCove Partners, L.L.C.	-	100,000
Meketa Investment Group, Inc.	240,000	60,000
Stout Risius Ross, Inc.	175,000	-
	415,000	160,000
Secondary market advisors		
Evercore Group L.L.C.	4,849,348	-
Legal services		
DLA Piper, L.L.P.	1,102,148	783,359
Tax advisory services		
Ernst & Young Private, Ltd.	255,654	110,892
Other investment expense		
Auditing costs	228,530	368,886
Communication services	22,602	21,730
Education, meetings and travel	38,617	9,498
Investment activity expenses	1,946,218	3,631,485
Investment analytical systems	956,396	1,053,172
Personnel costs	4,767,793	4,898,704
Research, subscriptions and memberships	62,230	68,401
Other costs	203,052	220,569
	8,225,438	10,272,445
Total investment expenses	**$470,576,250**	**$463,616,441**

Note: Foreign tax expense for FY22 included in investments realized gain/loss. Adjusted FY21 for comparable. Investment manager fee detail is shown on pages 73 to 76.

SCHEDULE OF PROFESSIONAL SERVICES FOR THE YEARS ENDED JUNE 30

	2022	2021
Actuarial services		
The Segal Company Midwest, Inc.	$162,225	$239,646
External auditors		
Office of the Auditor General (FORVIS, L.L.P.)	229,699	225,356
Legal services		
Elrod Friedman L.L.P.	32,730	136,302
Holland & Knight, L.L.P.	101,397	43,560
Howard & Howard Attorneys, P.L.L.C.	65,308	13,421
Ice Miller L.L.P.	13,072	-
King & Spalding L.L.P.	-	361,862
Kopec White & Spooner	-	2,720
Nixon Peabody L.L.P.	2,056	-
Reinhart Boerner Van Deuren s.c.	67,081	49,288
Whitt Law, L.L.C.	2,038	4,600
	283,682	611,753
Legislative consulting		
Leinenweber Baroni & Daffada Consulting, L.L.C.	84,000	84,000
Information systems consulting		
AT & T Corp.	-	590
Apex Systems	680,076	-
Capitol Strategies Consultants Inc.	684,981	-
Carahsoft Technology Corp.	-	14,193
CDW L.L.C.	-	42,800
Compulink Management Center Inc.	38,250	-
Dayagdag, Chris	185,844	153,520
Decker Innovations Inc.	395,895	-
Ellerman, Greg	137,183	-
FireEye Inc.	-	18,538
HSO North America, L.L.C.	78,600	84,420
McDonald Hopkins L.L.C.	1,567	1,462
Mellor, William Thomas	19,800	10,400
Mythics Emergent Group Inc.	4,844	-
ProCircular, Inc.	-	21,850
Promet Solutions Corporation	68,375	47,375
Sentinel Technologies, Inc.	132,911	7,800
Telos Corporation	76,800	-
The Segal Company Midwest Inc.	14,620	188,773
VPMA Global Services L.L.C.	-	21,750
	2,519,746	613,471
Operations consulting		
CAPFinancial Partners L.L.C.	115,000	-
CEM Benchmarking, Inc.	50,000	50,000
Darlington & Company, Inc.	-	23,300
Higher Logic, L.L.C.	10,812	10,396
Hudepohl & Associates Inc.	86,458	-
Jasculca Terman Strategic Communications	46,000	30,000
Korn Ferry (US)	-	95,680
Management Association	4,100	-
SABA Software	4,662	1,782
The Segal Co. Western Stats Inc.	21,000	20,000
	338,032	231,158
Other	23,139	12,229
Total professional services	**$3,640,523**	**$2,017,613**

A family with their "Best Pair of Females" at the livestock show.

FFA students tossing hay during the FFA Farmyard Follies.

The Du Quoin State Fair

Farm education and youth exhibitors have had a huge presence over the last 100 years at the Du Quoin State Fair, the premier agricultural showcase in southern Illinois. This year, during the fair’s 11-day run, 311 youth exhibitors paraded livestock in front of judges. Young people from all over the region competed in the Future Farmers of America’s annual “Farmyard Follies” competition.

INVESTMENTS

INTRODUCTION

The Investment section of the TRS *Annual Comprehensive Financial Report* discloses the characteristics, structure and performance of The Teachers' Retirement System of the State of Illinois (TRS) trust fund for the fiscal year ended June 30, 2022. Included in the following section is the Defined Benefit Plan, a fiduciary component unit of TRS.

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, 2022. State Street has also provided detailed financial reports of all investments, receipts, disbursements, purchases and sales of securities and other transactions pertinent to the fund for FY22. 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 methodology. State Street calculates returns using industry best practices. Additionally, State Street 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, 2022	
Total fund fair value	$62.5 billion
1-year return (net of fees)	(1.2%)
3-year return (net of fees)	7.6%
5-year return (net of fees)	7.3%
10-year return (net of fees)	8.2%
20-year return (net of fees)	7.3%
30-year return (net of fees)	7.9%
Percent externally managed	100.0%
Number of external managers	177
Master Trustee and Custodian	State Street Bank and Trust Company
General consultant	RVK, Inc.

TRS is the 42nd 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, 2021.

INVESTMENT SUMMARY

The Teachers' Retirement System of the State of Illinois ("TRS," "System") 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 Board of Trustees ("Board") has a fiduciary responsibility to the members and beneficiaries of the System. The Board, in carrying out its fiduciary duties, has adopted a clearly defined investment policy including principles, objective and strategy.

INVESTMENT POLICY

The TRS Investment Policy, approved by the Board, guides TRS's investments. The policy specifically outlines the investment philosophy and practices of TRS and has been developed to serve as a reference point for the management of System assets. In order to assist System participants in achieving their financial security objectives, the Board shall adopt a long-term plan by which the assets of the System will be maintained and enhanced through prudent investments. In developing the Investment Policy, the Board and staff understand and accept their fiduciary obligations to the members of the System. These obligations are legal in nature and are outlined in the Illinois Pension Code [40 ILCS 5].

INVESTMENT PRINCIPLES

Provisions within the Illinois Pension Code specifically referring to the definitions, duties and responsibilities of a fiduciary are the foundation for the principles guiding TRS investment activity. 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.

INVESTMENT OBJECTIVE

The investment objective is to achieve long-term investment returns from a well-diversified and prudently invested portfolio, that meet or exceed the System's assumed rate of return, net of all management fees.

INVESTMENT STRATEGY

The System's asset allocation policy is intended to reflect, and be consistent with, the return objective and risk tolerance expressed in the Investment Policy. It is designed to provide the highest probability of meeting or exceeding the System's objectives at a controlled level of risk that is acceptable to the Board. In establishing its risk tolerance, the Board considers its ability to withstand short- and intermediate-term volatility in investment performance and fluctuations in financial condition of the plan.

The Board has approved a broad, four asset class structure focused on the underlying risk profiles of the investment universe. The four classes (equity, income, real assets and diversifying strategies) are then further allocated based on the underlying characteristics (*e.g.* public equity vs. private equity). The TRS portfolio remains fully diversified across 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. Descriptions of the four asset classes follow.

Equity

TRS's equity asset class broadly includes investments in global public equity securities and private equity investments and is intended to capture return relative to economic growth risk factors.

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.

Private equity includes investments that are placed and traded outside of the stock exchanges and other public markets. Over the long term, their return profile represents 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. TRS is widely diversified across all subsectors within private equity, including buyout, growth equity, venture capital and distressed debt.

Real Assets

The real assets asset class offers competitive returns derived from inflation risk factors, as well as provides diversification benefits relative to the growth risk factors inherent of portfolios of stocks and bonds. 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 provide 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.

Income

The income asset class intends to provide modest returns to the long-term portfolio through economic growth exposure, as well as serve as a liquidity source for overall portfolio rebalancing. It 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 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.

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, providing protection to the asset allocation's growth risk factors. This segment of the portfolio includes systematic macro, discretionary macro, opportunistic, risk parity and factor strategies. Investments in diversifying strategies are administered via both direct investment manager relationships and diversified fund of funds.

ASSET ALLOCATION

A pension fund's most important investment policy decision is the selection of its asset allocation. 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.

In determining the appropriate strategic allocation among the asset classes, the Board, with assistance from staff and the consultant, examine the historical and projected risk and return of the approved asset classes as well as the correlation among these asset classes. The Board also considers the expected impact of investment performance on the liabilities of the System for a range of reasonable investment policies. Based on its determination of the appropriate risk tolerance for the System, and its long-term return expectations, the Board authorizes the strategic and interim asset allocation targets.

TRS periodically compares the asset mix to policy targets to determine when rebalancing of the fund or changes to the interim policy targets are necessary. The Strategic Investment Listing table shows the asset allocation targets, as adopted by the Board of Trustees, compared to the total assets assigned to each particular asset class at June 30, 2022.

Strategic Investment Listing
Allocation Targets vs. Total Assets

	As of June 30, 2022				As of June 30, 2021	
Asset Class	Total Fund $ (Million)	Actual Percent	Interim Target	Long-term Target	Actual Percent	Long-term Target
Public equity	$20,425.2	32.5%	37.0%	37.0%	35.7%	34.0%
Private equity	10,195.5	16.3	14.0	15.0	16.0	15.0
Total Equity	**30,620.7**	**48.8**	**51.0**	**52.0**	**51.6**	**49.0**
Real estate	11,188.1	17.8	14.0	16.0	13.9	16.0
Other real assets	1,158.0	1.9	1.0	2.0	1.1	4.0
Total Real Assets	**12,346.1**	**19.7**	**15.0**	**18.0**	**15.0**	**20.0**
Total Diversifying Strategies	**4,535.0**	**7.2**	**7.0**	**4.0**	**8.7**	**10.0**
Global income	14,226.7	22.7	25.0	26.0	22.5	21.0
Short-term	991.5	1.6	2.0	-	2.3	-
Total Income	**15,218.2**	**24.3**	**27.0**	**26.0**	**24.7**	**21.0**
Pending settlements/expenses*	**(191.7)**	**NA**	**NA**	**NA**	**NA**	**NA**
Total TRS Fund	**$62,528.3**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Sources: State Street Bank and Trust and TRS

** This amount is included within the receivable and liability sections of the Statement of Fiduciary Net Position.*

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 explain 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

	2022		2021	
	Fair Value	% of Total	Fair Value	% of Total
U.S. treasuries & agencies	$854,339,648	1.4%	$760,917,735	1.2%
U.S. government-backed mortgages	93,593,103	0.1	681,894,069	1.1
Municipals	3,655,094	-	5,220,000	-
Asset-backed securities	65,662,209	0.1	81,053,316	0.1
Commercial/collateralized mortgages & loans	243,143,370	0.4	289,996,014	0.4
Commingled funds (U.S. & international)	2,780,199,463	4.4	2,920,618,212	4.6
Domestic corporate obligations	2,112,201,680	3.4	2,049,105,777	3.2
Foreign debt/corporate obligations	2,577,042,888	4.1	3,431,936,825	5.4
Total fixed income	**8,729,837,455**	**13.9**	**10,220,741,948**	**16.0**
U.S. equities	10,954,767,927	17.5	11,201,200,370	17.5
International equities	9,106,048,553	14.6	11,206,327,107	17.6
Total public equities	**20,060,816,480**	**32.1**	**22,407,527,477**	**35.1**
Diversifying strategies	4,447,346,399	7.1	5,541,737,095	8.7
Private debt	5,685,029,439	9.1	4,069,872,023	6.4
Private equity	10,195,515,067	16.3	10,178,044,705	15.9
Real estate	11,199,930,643	17.9	8,853,790,213	13.9
Other real assets	1,158,004,865	1.9	715,953,909	1.1
Total alternative investments	**32,685,826,413**	**52.3**	**29,359,397,945**	**46.0**
Derivatives	(4,884,136)	-	(5,405,619)	-
Short-term investments	959,097,903	1.5	1,756,658,884	2.7
Foreign currency	97,615,510	0.2	112,911,645	0.2
TRS total portfolio	**$62,528,309,625**	**100.0%**	**$63,851,832,280**	**100.0%**

Sources: State Street Bank and Trust and TRS

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.

Securities Holdings for the Years Ended June 30

Asset Type	2022	2021	2020	2019	2018
Fixed income	13.9%	16.0%	19.2%	21.6%	19.7%
Public equities	32.1	35.1	32.6	33.8	35.0
Diversifying strategies	7.1	8.7	10.8	10.2	11.2
Private debt	9.1	6.4	5.7	4.3	3.6
Private equity	16.3	15.9	12.6	12.1	13.0
Real estate	17.9	13.9	15.0	13.9	13.9
Other real assets	1.9	1.1	0.7	1.0	0.9
Short-term/currency/derivatives	1.7	2.9	3.4	3.1	2.7
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

INVESTMENT RESULTS

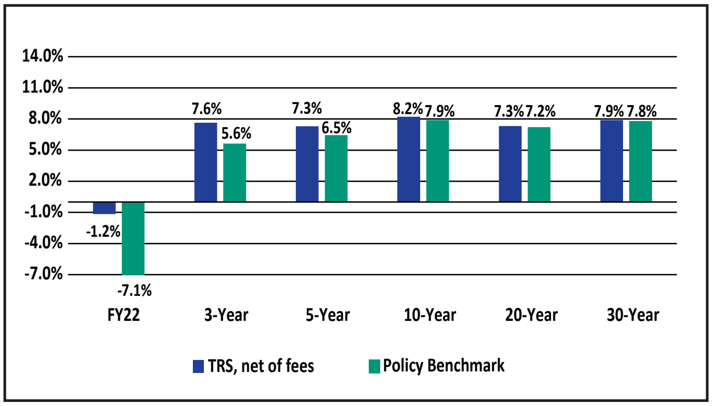
As of June 30, 2022, the fair value of TRS's investments as reported on the Statement of Fiduciary Net Position was $62.5 billion, a decrease of $1.3 billion from the prior year. TRS had a total fund annualized return of (0.6) percent, gross of fees, and (1.2) percent, net of fees, for the one-year period ended June 30, 2022.

In a volatile year for global financial markets, the investment strategy employed by TRS protected member assets and limited the System's portfolio loss in FY22 to (1.2) percent, net of fees, a favorable rate of return compared to other public pension systems across the country. TRS's conservative strategy performed as intended during a period of economic instability as market volatility, rising inflation and interest rate increases materialized in early calendar year 2022.

Due to the under-funded status of TRS, the System's primary objective is to protect member assets against large market downturns caused by economic unpredictability, as experienced within the year. A prudent investment strategy consists of a diversified portfolio that seeks to participate in the upside of the market but also is positioned to better protect assets in times of high market volatility. While a negative investment return for the fiscal year is a slight setback in the System's progress toward long-term financial health, the downside protection captured by the portfolio's asset allocation preserved the integrity of plan assets in the short term. Because TRS has relationships with members for several decades, the System focuses its attention on its long-term investment rate of return. At the end of FY22, the 30-year rate of return, net of fees, was 7.9 percent, which bests the System's estimated long-term investment rate of 7.0 percent.

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)

	Years ended June 30					Annualized at 6/30/22		
Asset Class/Index	2022	2021	2020	2019	2018	3 Years	5 Years	10 Years
TRS total fund	**(1.2)%**	**25.5%**	**0.6%**	**5.2%**	**8.5%**	**7.6%**	**7.3%**	**8.2%**
TRS weighted policy index*	(7.1)	20.3	5.5	7.2	8.2	5.6	6.5	7.9
Equity	**(8.5)**	**45.8**	**(0.1)**	**5.5**	**12.8**	**10.0**	**9.7**	**10.6**
TRS equity composite benchmark [1]	(15.1)	42.8	3.4	6.5	13.0	7.8	8.6	10.6
Real assets	**25.8**	**13.5**	**(0.2)**	**2.7**	**7.4**	**12.5**	**9.5**	**9.6**
TRS real asset composite benchmark [2]	22.6	8.1	3.4	6.6	7.4	11.1	9.4	9.5
Diversifying strategies	**7.5**	**8.6**	**1.2**	**2.1**	**4.5**	**5.7**	**4.7**	**4.3**
TRS diversifying composite benchmark [3]	4.2	4.1	5.7	6.4	5.4	4.7	5.2	5.2
Income	**(5.4)**	**6.6**	**1.7**	**7.0**	**2.0**	**0.9**	**2.3**	**3.7**
TRS income composite benchmark [4]	(9.6)	(0.3)	8.2	7.4	(0.3)	(0.8)	0.9	1.5

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

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

Sub Asset Class	***Benchmark***
Public equity	*MSCI ACWI Investable Market Index*
Private equity	*Russell 3000 index + 3.0%*

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

Sub Asset Class	***Benchmark***
Real estate	*Custom Blend: NCREIF ODCE (50.0%), Burgiss Opportunistic (31.4%), Burgiss Value Add (18.6%) Indices*
Other real assets	*CPI (inflation) + 5.0%*

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

Sub Asset Class	***Benchmark***
Diversifying Strategies	*ICE BofAML 3 Month U.S. Treasury Bill Index + 4.0%*

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

Sub Asset Class	***Benchmark***
Global fixed income	*Bloomberg Aggregate Index (Hedged)*
Short-term investments	*ICE BofAML 91-day U.S. Treasury Bill Index*

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, 2022.

Collateral Type	Collateral Received	Securities on Loan	Collateral %
Cash collateral	$2,162,391,516	$2,112,646,342	102.4%
Non-cash collateral	55,971,973	47,889,788	116.9
Total	**$2,218,363,489**	**$2,160,536,130**	**102.7%**
Reinvested cash collateral	$2,162,401,100		

Source: 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, 2022, TRS earned net income of $8.0 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 FY22	
Securities lending income	$12,045,131
Borrower rebates	(3,584,547)
Lending agent fees	(507,615)
Securities lending net income	$7,952,969
Loan Averages During FY22	
Available to loan	$23,142,383,707
Securities on loan	2,302,851,725
Percentage on loan	10.0%

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

BROKERAGE ACTIVITY

The following table shows the top 50 brokers used by TRS external equity managers for the year ended June 30, 2022. TRS also manages a commission recapture program as part of its trading strategies. For the year ended June 30, 2022, TRS recaptured $0.02 million in cash that was reinvested in the fund. In addition, TRS uses commission recapture refunds to pay for Investment Department expenses. During FY22, TRS used $0.04 million of recaptured funds to offset expenses.

Top 50 Brokers Used by TRS Managers

Broker	Shares Traded	FY22 Commission
Instinet, L.L.C. (Worldwide)	1,065,154,442	$905,845
Citigroup, Inc. and all Subsidiaries (Worldwide)	499,158,597	829,056
Merrill Lynch & Co., Inc. and all Subsidiaries (Worldwide)	173,367,469	516,228
HSBC Bank PLC	403,174,717	331,115
UBS AG	209,021,050	294,256
J.P. Morgan Securities, Inc. (Worldwide)	232,725,482	292,868
Morgan Stanley & Co., Inc. and Subsidiaries (Worldwide)	111,651,402	246,414
Goldman Sachs & Co. (Worldwide)	158,773,401	243,326
Credit Lyonnais Securities	568,792,734	209,330
CLSA Securities	78,647,323	200,428
Credit Suisse (Worldwide)	140,167,514	192,910
Macquarie Bank & Securities, Ltd. (Worldwide)	34,034,089	170,252
Jefferies & Company, Inc.	35,357,078	165,004
Barclays (Worldwide)	12,986,859	164,255
Loop Capital Markets, L.L.C.	17,303,392	153,399
KCG Americas L.L.C	24,580,239	102,258
Pershing, L.L.C.	16,987,968	72,403
Edelweiss Securities, Ltd.	1,069,115	69,645
BNP Paribas Securities Services S.C.A.	43,116,413	62,483
Royal Bank of Canada (Worldwide)	5,713,605	62,062
Sanford Bernstein (Worldwide)	13,738,043	60,694
Cowen, Inc.	34,291,722	60,653
Kim Eng Securities, Ltd.	1,189,759	59,532
ICICI Brokerage Services, Ltd.	29,708,071	55,507
Bank of Montreal	3,322,794	46,309
Societe Generale S.A. and all Subsidiaries	12,878,255	$39,167
BTIG, L.L.C.	1,843,037	32,938
Piper Jaffray Companies	3,398,133	31,384
PEAK6 Sports, L.L.C.	928,736	27,697
Ambit Holdings Pvt., Ltd.	428,091	27,592
Penserra Securities, L.L.C.	6,911,606	27,497
Cabrera Capital Markets, Inc.	3,132,839	26,457
Investment Technology Group, Inc. (Worldwide)	5,063,820	21,101
EFG Hermes Holding S.A.E	17,826,837	19,804
AllianceBernstein Holding L.P.	122,947,513	18,381
Enam Securities Pvt., Ltd.	258,844	17,670
Exane, Inc.	2,573,450	16,754
Kotak Securities, Ltd.	245,998	16,722
XP Investimentos S.A.	5,557,746	16,531
Liquidnet, Inc.	4,221,460	15,519
Daiwa Securities Group, Inc.	3,422,975	14,404
Craigs Investment Partners, Ltd.	2,257,193	14,135
Joh. Berenberg, Gossler & Co.	2,880,429	13,649
Banco Bradesco, S.A.	5,832,730	12,908
Shinhan Financial Group Co., Ltd.	73,600	12,569
Mirae Asset Daewoo Co., Ltd.	188,537	12,165
Banco BTG Pactual S.A	4,806,779	9,858
Itaú Unibanco Holding S.A.	1,677,992	9,698
Carnegie Holding AB	2,021,008	8,419
China International Capital Corporation, Ltd.	1,964,800	8,366
(All Others - 96 Brokers)	16,066,457	153,832
Total	**4,143,442,143**	**$6,191,449**

Sources: State Street Bank and Trust and TRS

INVESTMENT MANAGER AND CUSTODIAN FEES

For the year ended June 30, 2022, fee payments to external investment managers and the master custodian totaled $453.2 million.

Schedule of Fees

Investment Manager/Account	FY22
A & M Capital Partners II, L.P.	$250,690
Acadian Asset Management, L.L.C.	8,287,404
Advent International GPE VI Limited Partnership	83,704
Advent International GPE VII-C Limited Partnership	421,140
Advent International GPE VIII-B-2 Limited Partnership	967,407
AllianceBernstein, L.P.	2,768,416
Alphadyne Global Rates Fund II, Ltd.	8,984,534
Altaris Health Partners V, L.P.	(295,124)
Apollo Investment Fund VIII, L.P.	550,668
Apollo Investment Fund IX, L.P.	2,833,503
Apollo Lincoln Fixed Income Fund, L.P.	3,994,777
Apollo Lincoln Private Credit Fund, L.P.	38,283
AQR Capital Management, L.L.C.	2,946,938
Arbour Lane Credit Opportunity Fund III (A), L.P.	145,674
Arlington V, L.P.	1,500,000
Arrowstreet Capital, L.P.	22,729,577
ASP ILSTRS Asia SMA 1, L.P.	604,327
ASP ILSTRS Europe SMA 1, L.P.	604,327
Aspect Systematic Global Macro US Fund L.L.C.	853,006
Astorg VI, SLP	170,382
Astorg VII, SLP	240,360
Aurora Equity Partners VI, L.P.	1,136,979
Avance Investment Partners, L.P.	477,846
Axiom International Investors, L.L.C.	1,917,041
Barings, L.L.C.	5,146,833
Battery Ventures XI-A, L.P.	189,617
Battery Ventures XI-A Side Fund, L.P.	94,848
Beach Point Sangamon, L.P.	10,992,042
Bertram Growth Capital IV, L.P.	241,526
BIF IV Renewable Sidecar-B, L.P.	1,129,784
BIG Real Estate Fund I, L.P.	484,217
BIG Real Estate Fund II, L.P.	937,499
BioPharma Credit Investments V, L.P.	220,557
Black River Agriculture Fund 2, L.P.	878,352
Blackstone Infrastructure Partners, L.P.	1,965,033
Blackstone Real Estate Partners Asia, L.P.	524,126

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Investment Manager/Account	FY22
Blackstone Real Estate Partners Asia II, L.P.	$1,352,698
Blackstone Real Estate Partners VII, L.P.	763,039
Blackstone Real Estate Partners VIII.TE.2, L.P.	2,275,527
Blackstone Real Estate Partners IX, L.P.	3,750,000
Blantyre Special Situations Fund II, L.P.	540,239
Brasa Real Estate Fund II, L.P.	759,847
Bregal Sagemount III-B, L.P.	1,500,000
Bregal Unternehmerkapital III-A SCSp	1,082,740
Brevan Howard Alpha Strategies Fund, L.P.	9,797,328
Brevan Howard Systematic Trading Fund, L.P.	2,170,509
Bridgewater All Weather China, Ltd.	495,964
Brookfield Infrastructure Fund IV, L.P.	1,717,419
CapitalSpring Investment Partners VI, L.P.	1,559,646
Capstone Vol (US), L.P.	6,594,955
Carlyle Europe Real Estate Partners III, L.P.	14,646
Carlyle Global Infrastructure Opportunity Fund, L.P.	498,525
Carlyle Realty Partners VII, L.P.	319,352
Carlyle Realty Partners VIII, L.P.	1,563,920
Causeway Capital Management L.L.C.	173,779
Cerberus 2112 Loan Opportunities Fund, L.L.C.	6,132,603
Cerberus Real Estate Debt Fund, L.P.	593,545
Cerberus Real Estate Debt Fund II, L.P.	40,358
Charlesbank Equity Fund X, L.P.	591,363
Clearlake Capital Partners III, L.P.	202,893
Clearlake Capital Partners IV, L.P.	435,553
Clearlake Capital Partners V, L.P.	316,624
Clearlake Capital Partners VI, L.P.	(333,669)
Clearlake Capital Partners VII, L.P.	1,341,258
Clearlake Flagship Plus Partners, L.P.	15,032
Clearlake Opportunities Partners (P), L.P.	668,322
Crabel Fund, L.P.	539,849
DCP Asia Credit Fund III, L.P.	149,332
DCP China Credit Fund II, L.P.	(88,646)
Dolan McEniry Capital Management, L.L.C.	1,164,490
DoubleLine Mortgage Opportunities, L.P.	586,031
EIF United States Power Fund IV, L.P.	497,849

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Investment Manager/Account	FY22
EISAF II, L.P.	$451,548
Emerald Advisers, Inc.	1,272,893
EQT IX (No. 2) USD SCSp	2,800,000
EQT Midmarket Europe, L.P.	1,032,065
EQT VI, L.P.	19,420
EQT VII, L.P.	739,304
EQT VIII, L.P.	1,685,991
European Property Investors Special Opportunities 5 SCSp-SIF	1,135,024
Exeter Europe Industrial Core Fund S.C.Sp.	1,042,536
Exeter Industrial Core Fund III, L.P.	705,177
Exeter Industrial Value Fund V, L.P.	1,200,000
Exeter Value Fund IV, L.P.	221,892
FinTech Collective Fund III, L.P.	470,611
Fortress Japan Opportunity Fund III (Dollar A), L.P.	258,264
Fortress Japan Opportunity Fund IV (Dollar A), L.P.	(51,028)
Franklin Advisers, Inc.	1,181,907
Fundamental Partners IV, L.P.	2,089,539
Garcia Hamilton & Associates, L.P.	715,186
Gateway Real Estate Fund IV, L.P.	112,544
Global Transport Income Fund Master Partnership SCSp	683,329
Graham Global Investment Fund I SPC Ltd.	3,832,406
Grain Communications Opportunity Fund, L.P.	601,567
Grain Communications Opportunity Fund II, L.P.	487,898
Grain Communications Opportunity Fund III, L.P.	824,817
Grandeur Peak Global Advisors	2,338,126
Granite Ventures II, L.P.	74,160
Greenspring IL Master, L.P.	2,151,775
Greenspring IL Master 2.0, L.P.	605,130
Grosvenor Monarch Fund, L.L.C.	2,330,316
Harvest Partners Structured Capital Fund II, L.P.	545,984
Hayfin Chief, L.P.	2,662,331
Heitman Capital Management, L.L.C.	6,111,172
IC Hospitality Fund II, L.P.	167,306
ICG Santo SCSp	3,174,123
ICV Partners IV, L.P.	244,329
IL Asia Investors, L.P.	890,996
Inflexion Buyout Partnership V, L.P.	699,292
Inflexion Enterprise Fund V (No. 1), L.P.	266,990
Inflexion Partnership Capital II, L.P.	594,702
Inflexion Supplemental Fund V (No. 1), L.P.	436,191

(continued)

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Investment Manager/Account	FY22
Insight Partners Opportunities Fund I, L.P.	$417,372
Insight Partners XII, L.P.	1,854,573
Institutional Venture Partners XV, L.P.	894,625
Institutional Venture Partners XVI, L.P.	1,292,713
Invesco Institutional (N.A.), Inc.	4,905,435
JMI Equity Fund VIII-A, L.P.	109,349
JP Morgan Investment Management, Inc.	3,421,883
Kirkoswald Global Macro Fund, L.P.	32,389,959
KKR Real Estate Partners Americas III, SCSp	3,000,874
L2 Point Opportunities I, L.P.	59,024
LaSalle Asia Opportunity Fund IV, L.P.	29,411
LCM Partners CO IIIa, L.P.	554,870
LCM Partners COPS 4, L.P.	424,637
LCM Partners SOLO III, L.P.	740,982
Light Sky Macro Fund, L.P.	3,393,000
Lightspeed Opportunity Fund II, L.P.	6,288
Lightspeed Venture Partners IX, L.P.	475,437
Lightspeed Venture Partners X, L.P.	285,263
Lightspeed Venture Partners XI, L.P.	272,969
Lightspeed Venture Partners XIV, L.P.	250,000
Lightspeed Venture Partners Select, L.P.	345,650
Lightspeed Venture Partners Select II, L.P.	376,000
Lightspeed Venture Partners Select V, L.P.	250,000
Lion Industrial Trust	9,088,128
LiveOak Venture Partners I, L.P.	270,000
LiveOak Venture Partners III, L.P.	187,500
Locust Point Senior Housing Debt II, L.P.	742,500
Locust Point Senior Mortgage Fund, L.P.	272,452
Lone Star Real Estate Fund III (U.S.), L.P.	(405)
Lone Star Real Estate Fund IV (U.S.), L.P.	215,768
Lone Star Real Estate Fund V (U.S.), L.P.	265,781
Lone Star Real Estate Fund VI, L.P.	1,545,847
Longitude Venture Partners II, L.P.	96,597
Longitude Venture Partners III, L.P.	774,462
LPC Realty Advisors I, Ltd.	3,619,449
LSV Asset Management	6,685,678
MacKay Shields, L.L.C.	2,036,871
Macquarie European Infrastructure Fund 6 SCSp	2,262,197
Macquarie Global Infrastructure Fund SCSp	116,068
Macquarie Infrastructure Partners V, L.P.	1,651,531
Madison Dearborn Capital Partners VII, L.P.	135,111

(continued)

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Investment Manager/Account	FY22
Madison International Real Estate Liquidity Fund VI (TE), L.P.	$1,019,029
Magnetar Constellation Fund IV, L.L.C.	1,636,599
Magnetar Constellation Fund V, L.L.C.	5,339,782
Maniyar Macro Fund, L.P.	2,568,898
Maranon Senior Credit Fund II-B, L.P.	57,257
Marlin Equity V, L.P.	268,778
MBK Partners Fund III, L.P.	410,213
MBK Partners Fund IV, L.P.	712,201
MBK Partners Fund V, L.P.	3,080,072
MBK Partners Special Situations II, L.P.	1,700,411
Mill Point Capital Partners II, L.P.	804,364
Monroe Capital Private Credit Fund II, L.P.	285,881
Morgan Creek Partners Asia, L.P.	497,483
New Enterprise Associates 15, L.P.	424,669
New Enterprise Associates 16, L.P.	550,808
New Mountain Partners IV, L.P.	282,454
New Mountain Partners V, L.P.	484,902
New Mountain Partners VI, L.P.	1,631,493
NGP Natural Resources X, L.P.	388,426
NGP Natural Resources XI, L.P.	960,084
NGP Natural Resources XII, L.P.	1,461,101
Niam Nordic V, L.P.	234,980
NMS Fund IV, L.P.	1,032,646
Northern Shipping Fund III, L.P.	615,551
Northern Shipping Fund IV, L.P.	1,679,687
Northern Trust Investments, Inc.	1,363,122
NXT Capital Senior Loan Fund IV, L.P.	880,432
NXT Capital Senior Loan Fund V, L.P.	947,004
Oak Street Real Estate Capital Fund IV, L.P.	619,909
Oak Street Real Estate Capital Fund V, L.P.	643,701
Oak Street Real Estate Capital Net Lease Property Fund, L.P.	2,790,329
Oaktree Enhanced Income Fund III, L.P.	421,777
Oaktree European Principal Fund III, L.P.	640,847
Oaktree Opportunities Fund IX, L.P.	885,151
Oaktree Opportunities Fund Xb, L.P.	1,558,856
Oaktree Real Estate Debt Fund II, L.P.	408,262
Oaktree Real Estate Debt Fund III, L.P.	78,371
OceanSound Partners Fund, L.P.	119,988
Pacific Investment Management Company, L.L.C.	9,562,016
Palladium Equity Partners IV, L.P.	73,621

(continued)

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Investment Manager/Account	FY22
Pamlico Capital V, L.P.	$1,000,000
Parthenon Investors VI, L.P.	862,275
Payden & Rygel	96,676
PDT Mosaic Offshore Holdings, L.L.C.	10,910,162
Pemberton Debt Fund Delaware I, L.P.	589,662
Pemberton Debt Fund Delaware II, L.P.	1,152,577
PGIM Fixed Income Alternatives Fund II, L.P.	714,473
PGIM Fixed Income Global Liquidity Relative Value Fund I (Cayman), Ltd.	4,412,872
PGIM, Inc.	4,275,215
PIMCO BRAVO Fund Onshore Feeder II, L.P.	413,021
PIMCO BRAVO Fund III Onshore Feeder, L.P.	1,087,039
PIMCO BRAVO Fund IV Onshore Feeder, L.P.	701,338
PIMCO Commercial Real Estate Debt Fund, L.P.	671,437
PIMCO Commercial Real Estate Debt Fund II, L.P.	77,557
PIMCO Corporate Opportunities Fund III, L.P.	1,084,967
Pretium Residential Credit Fund II, L.P.	2,556,476
Principal Real Estate Investors, L.L.C.	1,395,529
Proterra Credit Fund, L.P.	519,904
Proterra Credit Fund 2, L.P.	112,460
Providence Equity Partners VII, L.P.	361,147
PSG V L.P.	1,634,801
RCP SBO Fund, L.P.	973,750
RCP SBO Fund II, L.P.	741,162
RCP SBO Fund III, L.P.	13,993
Rhone Partners IV, L.P.	59,787
Rhone Partners V, L.P.	785,819
RhumbLine Advisers, L.P.	721,985
Ridgemont Equity Partners III, L.P.	(250,000)
Riverstone Credit Partners, L.P.	211,889
Riverstone Credit Partners II, L.P.	666,038
Riverstone Global Energy and Power Fund V, L.P.	1,426,341
Riverstone Global Energy and Power Fund VI, L.P.	1,064,796
Riverstone/Carlyle Global Energy and Power Fund IV, L.P.	31,243
Rockpoint Real Estate Fund V, L.P.	900,336
Rockpoint Real Estate Fund VI, L.P.	1,997,372
RRJ Capital Master Fund III, L.P.	599,138
Scale Venture Partners V, L.P.	546,849
Scale Venture Partners VII, L.P.	855,100
SCP Private Corporate Lending Fund, L.P.	1,346,061
Sheridan Production Partners III-B, L.P.	254,548

(continued)

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Investment Manager/Account	FY22
Silver Lake Alpine, L.P.	$443,240
Silver Lake Alpine II, L.P.	11,129
Silver Lake Partners III, L.P.	56,180
Silver Lake Partners IV, L.P.	928,805
Silver Lake Partners V, L.P.	1,269,025
Silver Lake Partners VI, L.P.	1,954,827
Siris Partners II, L.P.	250,076
Siris Partners IV, L.P.	548,422
SK Capital Catalyst Fund I, L.P.	66,073
SK Capital Partners V-A, L.P.	63,860
Sky9 Capital Fund V, L.P.	549,605
Sky9 Capital MVP Fund II, L.P.	9,470
SLR HC Onshore Fund L.P.	257,750
Sofinnova Venture Partners VIII, L.P.	9,233
Sofinnova Venture Partners IX, L.P.	995,155
Sofinnova Venture Partners X, L.P.	1,381,341
StarVest Partners II, L.P.	71,405
Starwood Distressed Opportunity Fund IX Global, L.P.	773,355
Starwood Distressed Opportunity Fund XII, L.P.	3,333,857
Starwood Opportunity Fund X Global, L.P.	1,740,426
Starwood Opportunity Fund XI Global, L.P.	2,989,039
Starwood Value Add Fund, L.P.	1,390,968
Starwood X Annex A	1,405
Starwood X Annex B	5,683
State Street Bank and Trust Company (Custody)	3,952,800
Stellex Capital Partners II, L.P.	674,946
Stonepeak Infrastructure Fund IV, L.P.	1,538,263
Strategic Global Advisors, L.L.C.	3,070,380
Strategic Partners Infrastructure III, L.P.	1,800,000
Sunstone Partners I, L.P.	366,668
Sunstone Partners II, L.P.	484,917
T. Rowe Price Associates, Inc.	1,081,110
TA XII-A, L.P.	1,038,657
TA XIII, L.P.	1,343,262
TA XIV-A, L.P.	1,178,886
Taconic European Credit Dislocation Fund III, L.P.	347,342
Taplin, Canida & Habacht, L.L.C.	831,520

(continued)

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Investment Manager/Account	FY22
Taurus Mining Finance Annex Fund L.L.C.	$44,120
Taurus Mining Finance Fund L.L.C.	70,033
Taurus Mining Finance Fund II, L.P.	1,562,500
TCW Asset Management Company	3,245,699
TDR Capital IV 'A', L.P.	796,872
TerraCotta Credit Fund, L.P.	937,523
The Baring Asia Private Equity Fund V, L.P.	831,156
The Baring Asia Private Equity Fund VI, L.P.1	630,862
The Varde Private Debt Opportunities Fund (Onshore), L.P.	515,787
Thomas H. Lee Equity Fund IX, L.P.	2,116,438
Tilden Park Investment Fund, L.P.	4,455,519
Trend Macro Onshore, L.P.	5,085,987
Trident V, L.P.	395,066
Trident VI, L.P.	580,879
Trident VII, L.P.	1,068,889
Trident VIII, L.P.	1,155,372
Trident IX, L.P.	1,858,696
TRS Coriolis, L.P.	27
Trustbridge Partners IV, L.P.	337,643
TSG 8, L.P.	1,797,657
Varadero International, Ltd.	9,800,969
Varadero Special Opportunities International, L.P.	1,832,708
Vista Equity Partners Fund V, L.P.	1,347,243
Vista Equity Partners Fund VI, L.P.	2,197,706
Vista Foundation Fund III, L.P.	729,479
Vista Foundation Fund IV, L.P.	1,000,766
Walton Street Real Estate Core-Plus Fund, L.P.	968,149
Walton Street Real Estate Fund VI, L.P.	83,346
Walton Street Real Estate Fund VII, L.P.	523,102
Wasatch Advisors, Inc.	2,550,248
West Street Global Infrastructure Partners III, L.P.	330,611
Westbrook Real Estate Fund X, L.P.	540,589
Westbrook Real Estate Fund XI, L.P.	2,550,000
William Blair Investment Management, L.L.C.	197,651
ZMC III, L.P.	274,971
Total fees paid by TRS	**$453,241,168**

INVESTMENT ASSETS UNDER MANAGEMENT

	Assets
Public Equity	
Acadian Asset Management, L.L.C.	$1,224,945,764
AQR Capital Management, L.L.C.	416,576,733
Arrowstreet Capital, L.P.	2,044,395,930
Axiom International Investors	296,387,398
Causeway Capital Management L.L.C.	331,426,414
Emerald Advisors, Inc.	198,340,404
Grandeur Peak Global Advisors, L.L.C.	239,736,725
J.P. Morgan Investment Management, Inc.	724,190,738
LSV Asset Management	1,222,466,045
Northern Trust Investments, Inc.	2,726,500,001
RhumbLine Advisors, L.P.	9,465,646,619
Strategic Global Advisors	462,495,878
T. Rowe Price Associates, Inc.	368,914,552
Wasatch Advisors	231,302,896
William Blair Investment Management, L.L.C.	311,350,333
Private Equity	
A & M Capital Partners II, L.P.	51,445,698
Advent International GPE VI Limited Partnership	5,572,867
Advent International GPE VII-C Limited Partnership	15,844,225
Advent International GPE VII-C Limited Partnership	2,796,040
Advent International GPE VIII-B-2 Limited Partnership	98,781,678
Altaris Constellation Partners IV, L.P.	15,276,103
Altaris Health Partners IV, L.P.	54,013,119
Altaris Health Partners V, L.P.	32,981,654
Altaris V-4041, L.P.	14,531,143
Apollo Investment Fund VI, L.P.	2,280,478
Apollo Investment Fund VI, L.P.	456,072
Apollo Investment Fund VII, L.P.	4,526,189
Apollo Investment Fund VII, L.P.	905,239
Apollo Investment Fund VIII Annex A	23,658,160
Apollo Investment Fund VIII, L.P.	113,745,667
Apollo Investment Fund IX Annex A	1,359,808
Apollo Investment Fund IX, L.P.	196,375,301
Apollo Lincoln Private Credit Fund, L.P.	4,551,178
Arlington V, L.P.	88,381,778

(continued)

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	Assets
ASP ILSTRS Asia SMA 1, L.P.	$5,300,937
ASP ILSTRS Europe SMA 1, L.P.	146,111
Aurora Equity Partners VI, L.P.	27,145,078
Avance Investment Partners, L.P.	8,221,469
Bain Relish Investor, L.P.	48,750,000
Battery Ventures XI-A, L.P.	23,299,230
Battery Ventures XI-A Side Fund, L.P.	15,014,963
Bertram Growth Capital IV, L.P.	48,011,598
Blackstone Capital Partners VI Annex A	20,467,849
Bregal Sagemount III-B, L.P.	52,328,034
Bregal Unternehmerkapital III-A SCSp	19,774,719
Carlyle/Riverstone Global Energy and Power Fund III, L.P.	1,206,350
Charlesbank Equity Fund X, L.P.	13,885,180
Charlesbank Equity Overage Fund X, L.P.	14,101,794
Clearlake Capital Partners II, L.P.	1,488,411
Clearlake Capital Partners III, L.P.	14,236,189
Clearlake Capital Partners IV, L.P.	90,752,425
Clearlake Capital Partners V, L.P.	105,745,669
Clearlake Capital Partners VI Annex A	18,098,551
Clearlake Capital Partners VI, L.P.	136,576,688
Clearlake Capital Partners VII, L.P.	44,156,392
Clearlake Flagship Plus Partners, L.P.	72,256,946
Clearlake Opportunities Partners (P), L.P.	57,307,786
Edgewater Growth Capital Partners, L.P.	1,385,458
Edgewater Growth Capital Partners II, L.P.	1,747,933
Edgewater Growth Capital Partners III, L.P.	19,873,479
EIF United States Power Fund IV, L.P.	34,947,227
Energy Capital Partners II Annex A	769,897
EQT IX (No. 2) USD SCSp	181,855,844
EQT Midmarket Europe, L.P.	65,366,075
EQT VI, L.P.	176,538
EQT VI, L.P.	31,154
EQT VII, L.P.	81,478,877
EQT VIII, L.P.	151,758,623
FinTech Collective Fund III, L.P.	35,007,253
Grain Communications Opportunity Fund, L.P.	39,927,343

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	Assets
Grain Communications Opportunity Fund II, L.P.	$68,415,834
Grain Communications Opportunity Fund III, L.P.	18,920,852
Granite Ventures II, L.P.	21,599,997
Greenspring IL Master, L.P.	364,495,883
Greenspring IL Master 2.0, L.P.	70,943,381
Greenspring IL Special, L.P.	692,628,263
Greenspring IL Special II, L.P.	42,850,650
GTCR Fund VIII, L.P.	641,818
Harvest Partners Structured Capital Fund II, L.P.	55,024,896
ICV Partners III, L.P.	18,059,957
ICV Partners IV, L.P.	28,916,756
IL Asia Investors, L.P.	284,704,732
Inflexion Buyout Partnership V, L.P.	46,812,138
Inflexion Enterprise Fund V (No. 1), L.P.	10,494,564
Inflexion Partnership Capital II, L.P.	29,522,093
Inflexion Supplemental Fund V (No. 1), L.P.	23,401,362
Insight Opportunities Fund I Annex A	11,729,150
Insight Partners Opportunities Fund I, L.P.	42,219,368
Insight Partners XII, L.P.	43,023,597
Institutional Venture Partners XV, L.P.	65,490,378
Institutional Venture Partners XVI, L.P.	110,274,707
Lightspeed Opportunity Fund II, L.P.	2,723,705
Lightspeed Venture Partners Select, L.P.	25,138,488
Lightspeed Venture Partners Select II, L.P.	34,284,278
Lightspeed Venture Partners Select V, L.P.	3,936,490
Lightspeed Venture Partners IX, L.P.	77,395,334
Lightspeed Venture Partners X, L.P.	50,499,072
Lightspeed Venture Partners XI, L.P.	39,118,666
Lightspeed Venture Partners XIV, L.P.	3,944,867
Littlejohn Fund IV, L.P.	11,635,486
LiveOak Venture Partners I, L.P.	36,152,430
LiveOak Venture Partners III, L.P.	1,270,161
Longitude Venture Partners II, L.P.	10,897,413
Longitude Venture Partners III, L.P.	34,181,684
Marlin Equity V, L.P.	93,425,086
MBK Partners Fund III Annex B	3,041,913
MBK Partners Fund III, L.P.	31,892,934

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	Assets
MBK Partners Fund IV, L.P.	$144,421,947
MBK Partners Fund V, L.P.	65,620,746
MBK Partners Special Situations II, L.P.	17,713,562
Mill Point Capital Partners II, L.P.	6,532,310
Morgan Creek Partners Asia, L.P.	60,829,521
New Enterprise Associates 15, L.P.	37,402,911
New Enterprise Associates 16, L.P.	57,170,289
New Mountain Partners III, L.P.	4,224,051
New Mountain Partners IV, L.P.	37,645,118
New Mountain Partners V, L.P.	140,587,954
New Mountain Partners VI, L.P.	72,344,328
NGP Natural Resources IX Annex A	201,721
NGP Natural Resources X, L.P.	14,782,605
NGP Natural Resources XI, L.P.	94,147,099
NGP Natural Resources XII, L.P.	89,941,797
NMS Fund IV, L.P.	12,739,391
Oaktree European Principal Fund III, L.P.	36,245,973
Oaktree Opportunities Fund IX, L.P.	78,819,798
Oaktree Opportunities Fund VIII, L.P.	814,032
Oaktree Opportunities Fund Xb, L.P.	89,290,291
OceanSound Partners Fund, L.P.	10,530,641
OCM Opportunities Fund VIIb, L.P.	46,773
Palladium Equity Partners IV, L.P.	12,588,651
Pamlico Capital V, L.P.	9,204,902
Parthenon Investors IV Annex A	169,361,136
Parthenon Investors IV, L.P.	53,870,967
Parthenon Investors V, L.P.	153,967,440
Parthenon Investors VI, L.P.	45,798,148
Providence Equity Partners VI Annex A	19,884,647
Providence Equity Partners VI International, L.P.	8,232,387
Providence Equity Partners VII, L.P.	184,153,294
PSG V L.P.	15,246,400
RCP Multi-Fund Feeder SBO 1.0, L.P.	31,042,699
RCP SBO Fund, L.P.	167,942,534
RCP SBO Fund II, L.P.	27,531,982
RCP SBO Opportunities Fund, L.P.	30,660,428
Rhone Capital V Annex A	35,653,494
Rhone Partners IV, L.P.	11,562,943

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	Assets
Rhone Partners V, L.P.	$116,554,167
Ridgemont Annex A	58,541,116
Ridgemont Equity Partners III, L.P.	64,782,971
Riverstone Global Energy and Power Fund V, L.P.	101,723,461
Riverstone Global Energy and Power Fund VI, L.P.	121,821,212
Riverstone/Carlyle Global Energy and Power Fund IV, L.P.	16,487
RRJ Capital Master Fund III, L.P.	14,653,634
Scale Venture Partners V, L.P.	104,649,038
Scale Venture Partners VII, L.P.	22,229,819
Shasta Ventures, L.P.	480,590
Silver Lake Alpine, L.P.	46,858,084
Silver Lake Alpine II, L.P.	19,396,228
Silver Lake Partners III, L.P.	24,492,892
Silver Lake Partners IV, L.P.	235,462,645
Silver Lake Partners V, L.P.	205,247,839
Silver Lake Partners VI, L.P.	113,222,100
Siris Partners II, L.P.	16,120,837
Siris Partners III, L.P.	82,759,227
Siris Partners IV, L.P.	54,224,313
SK Capital Catalyst Fund I, L.P.	65,757,311
SK Capital Partners V-A, L.P.	78,147,740
Sky9 Capital Fund V, L.P.	2,888,390
Sky9 Capital MVP Fund II, L.P.	2,046,754
Sofinnova Venture Partners VIII, L.P.	3,541,859
Sofinnova Venture Partners IX, L.P.	27,737,426
Sofinnova Venture Partners X, L.P.	53,556,463
StarVest Partners II, L.P.	4,531,600
Stellex Capital Partners II, L.P.	18,888,238
Sunstone Partners I, L.P.	34,686,218
Sunstone Partners II, L.P.	16,255,996
TA Select Opportunities Fund-A, L.P.	42,111,431
TA Select Opportunities Fund-A II, L.P.	4,910,291
TA XII-A, L.P.	86,930,200
TA XIII, L.P.	113,842,313
TA XIV-A, L.P.	30,327,049
TDR Capital IV 'A', L.P.	53,118,823
The Baring Asia Private Equity Fund V, L.P.	42,884,285
The Baring Asia Private Equity Fund VI, L.P.1	100,463,311

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	Assets
The Baring Asia Private Equity Fund VII Annex A	$25,029,712
Thomas H. Lee Equity Fund IX Annex A	39,372,650
Thomas H. Lee Equity Fund IX, L.P.	9,521,971
Trident V, L.P.	46,422,262
Trident VI, L.P.	99,772,898
Trident VII, L.P.	160,449,936
Trident VIII, L.P.	117,815,399
Trident IX Annex A	20,047,821
Trident IX, L.P.	11,720,194
Trustbridge Partners IV, L.P.	42,804,761
TSG 8, L.P.	60,548,518
Veritas Capital Fund IV, L.P.	1,904,917
Veritas Capital Fund V, L.P.	113,081,098
Veritas Capital Fund VI, L.P.	49,653,521
Vista Equity Partners Fund V, L.P.	169,897,492
Vista Equity Partners Fund VI, L.P.	209,554,180
Vista Foundation Fund III, L.P.	54,783,442
Vista Foundation Fund IV, L.P.	27,916,921
ZMC III, L.P.	10,771,045
Real Assets	
Barings, L.L.C.	694,163,402
BIF IV Renewable Sidecar-B, L.P.	63,080,519
Black River Agriculture Fund 2, L.P.	62,760,208
Blackstone Infrastructure Partners, L.P.	238,285,119
Blackstone Infrastructure Partners (Supplemental Account), L.P.	98,777,941
Blackstone Real Estate Partners Asia, L.P.	43,543,845
Blackstone Real Estate Partners Asia II, L.P.	90,706,967
Blackstone Real Estate Partners VI, L.P.	1,334,996
Blackstone Real Estate Partners VII, L.P.	51,418,401
Blackstone Real Estate Partners VIII.TE.2, L.P.	249,242,687
Blackstone Real Estate Partners IX, L.P.	275,294,203
Brasa Real Estate Fund II, L.P.	25,610,259
Brookfield Infrastructure Fund IV, L.P.	125,173,087
Carlyle Europe Real Estate Partners III, L.P.	322,931
Carlyle Realty Partners VII, L.P.	27,019,007
Carlyle Realty Partners VIII, L.P.	117,954,546
Carlyle Realty Qualified Partners IV, L.P.	860,742
CB Richard Ellis Strategic Partners Europe Fund III, L.P.	255,916

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	Assets
Dyal Capital III Annex A	$106,634,309
European Property Investors Special Opportunities 5 SCSp-SIF	83,897,458
Exeter Europe Industrial Core Fund S.C.Sp.	143,527,952
Exeter Industrial Core Fund III, L.P.	72,376,040
Exeter Industrial Value Fund V, L.P.	117,396,425
Exeter Value Fund IV, L.P.	5,608,342
Fortress Japan Opportunity Fund III (Dollar A), L.P.	70,847,200
Fortress Japan Opportunity Fund IV (Dollar A), L.P.	51,676,951
Gateway Real Estate Fund IV, L.P.	4,275,107
Heitman Capital Management, L.L.C.	1,964,797,602
IC Hospitality Fund II, L.P.	-
Invesco Commercial Mortgage Income Fund, L.P.	152,912,069
Invesco Institutional (N.A.), Inc.	1,452,581,307
KKR Real Estate Partners Americas III, SCSp	111,222,070
LaSalle Asia Opportunity Fund III, L.P.	911,996
LaSalle Asia Opportunity Fund IV, L.P.	4,384,940
Lion Industrial Trust	1,353,948,052
Lone Star Real Estate Fund III (U.S.), L.P.	191,319
Lone Star Real Estate Fund IV (U.S.), L.P.	68,432,393
Lone Star Real Estate Fund V (U.S.), L.P.	33,689,548
Lone Star Real Estate Fund VI, L.P.	111,672,406
LPC Realty Advisors I, Ltd.	863,432,814
Macquarie European Infrastructure Fund 6 SCSp	216,498,436
Macquarie Global Infrastructure Fund SCSp	37,919,827
Macquarie Infrastructure Partners V, L.P.	154,828,121
Madison International Real Estate Liquidity Fund VI (TE), L.P.	100,295,722
Niam Nordic V, L.P.	198,287
Oak Street Real Estate Capital Fund III, L.P.	808,623
Oak Street Real Estate Capital Fund IV, L.P.	66,278,011
Oak Street Real Estate Capital Fund V, L.P.	75,193,932
Oak Street Real Estate Capital Net Lease Property Fund, L.P.	358,040,605
Principal Real Estate Investors, L.L.C.	734,682,083
Rockpoint Real Estate Fund V, L.P.	80,266,772
Rockpoint Real Estate Fund VI, L.P.	165,288,026
Sheridan Production Partners III-B, L.P.	30,403,000

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	Assets
Southwest Multifamily Partners, L.P.	$455,527
Starwood Distressed Opportunity Fund IX Global, L.P.	52,107,188
Starwood Distressed Opportunity Fund XII, L.P.	71,840,500
Starwood Opportunity Fund X Global, L.P.	79,959,363
Starwood Opportunity Fund XI Global, L.P.	285,735,318
Starwood Value Add Fund, L.P.	321,196,957
Starwood IX Annex A	866,043
Starwood X Annex A	90,834
Starwood X Annex B	769,010
Stonepeak Infrastructure Fund IV, L.P.	88,042,838
Strategic Partners Infrastructure III, L.P.	42,235,769
Walton Street Real Estate Core-Plus Fund, L.P.	264,757,360
Walton Street Real Estate Fund IV, L.P.	480,132
Walton Street Real Estate Fund VI, L.P.	39,460,849
Walton Street Real Estate Fund VII, L.P.	26,198,761
Westbrook Real Estate Fund X, L.P.	36,562,927
Westbrook Real Estate Fund XI, L.P.	73,958,429
Income	
AllianceBernstein, L.P.	878,826,719
Apollo Lincoln Fixed Income Fund, L.P.	652,056,166
Apollo Revolver Fund, L.P.	-
Arbour Lane Credit Opportunity Fund III (A), L.P.	31,160,925
Beach Point Sangamon, L.P.	542,737,773
BIG Real Estate Fund I, L.P.	40,275,321
BIG Real Estate Fund II, L.P.	14,866,438
BioPharma Credit Investments V, L.P.	67,488,773
Blantyre Special Situations Fund II, L.P.	26,579,564
CapitalSpring Investment Partners VI, L.P.	21,684,920
Cerberus 2112 Loan Opportunities Fund, L.L.C.	299,139,867
Cerberus Real Estate Debt Fund, L.P.	107,572,540
Cerberus Real Estate Debt Fund II, L.P.	30,432,474
DCP Asia Credit Fund III, L.P.	40,629,201
DCP China Credit Fund II, L.P.	21,198,709
Dolan McEniry Capital Management, L.L.C.	840,421,212
DoubleLine Mortgage Opportunities, L.P.	46,685,794
EISAF II, L.P.	66,674,697
Fundamental Partners IV, L.P.	70,055,275

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	Assets
Garcia Hamilton & Associates, L.P.	$342,806,815
Garcia Hamilton Collective Investment Trust	2,318,027
Global Transport Income Fund Master Partnership SCSp	146,768,678
Hayfin Chief, L.P.	264,587,080
ICG Santo SCSp	593,090,732
L2 Point Opportunities I, L.P.	8,581,852
LCM Partners CO IIIa, L.P.	38,026,454
LCM Partners COPS 4, L.P.	55,283,795
LCM Partners SOLO III, L.P.	77,453,346
Locust Point Senior Mortgage Fund, L.P.	8,780,346
Locust Point Senior Housing Debt II, L.P.	25,904,081
MacKay Shields L.L.C.	802,501,538
Maranon Senior Credit Fund II-B, L.P.	6,469,553
Monroe Capital Private Credit Fund II, L.P.	16,164,231
Northern Shipping Fund III, L.P.	6,689,797
Northern Shipping Fund IV, L.P.	57,889,503
NXT Capital Senior Loan Fund II, L.P.	2,854,024
NXT Capital Senior Loan Fund IV, L.P.	100,568,289
NXT Capital Senior Loan Fund V, L.P.	77,428,888
Oaktree Enhanced Income Fund II, L.P.	1,050,685
Oaktree Enhanced Income Fund III, L.P.	41,740,003
Oaktree Real Estate Debt Fund II, L.P.	34,397,464
Oaktree Real Estate Debt Fund III, L.P.	20,878,531
Pacific Investment Management Company, L.L.C.	1,087,611,580
Payden & Rygel	237,799,485
Pemberton Debt Fund Delaware I, L.P.	35,044,636
Pemberton Debt Fund Delaware II, L.P.	90,243,302
PGIM Fixed Income Alternatives Fund II, L.P.	130,812,464
PGIM Fixed Income Global Liquidity Relative Value Fund I (Cayman), Ltd.	559,213,289
PGIM, Inc.	908,152,810
PIMCO BRAVO Fund Onshore Feeder I, L.P.	55,307
PIMCO BRAVO Fund Onshore Feeder II, L.P.	17,773,169
PIMCO BRAVO Fund III Onshore Feeder, L.P.	97,038,424
PIMCO BRAVO Fund IV Onshore Feeder, L.P.	104,347,856
PIMCO Commercial Real Estate Debt Fund, L.P.	57,970,706
PIMCO Commercial Real Estate Debt Fund II, L.P.	14,758,344
PIMCO Corporate Opportunities Fund II, L.P.	45,030,185

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	Assets
PIMCO Corporate Opportunities Fund III, L.P.	$147,152,131
PIMCO Horseshoe Fund, L.P.	717,976,667
Pretium Residential Credit Fund II, L.P.	98,214,704
Proterra Credit Fund, L.P.	25,478,156
Proterra Credit Fund 2, L.P.	8,084,388
Prudential Trust Company Collective Trust	1,070,138,712
Riverstone Credit Partners, L.P.	23,454,096
Riverstone Credit Partners II, L.P.	57,846,458
SCP Private Corporate Lending Fund, L.P.	130,882,744
SLR HC Onshore Fund L.P.	19,846,071
Taplin, Canida & Habacht	1,159,555,768
Taurus Mining Finance Annex Fund L.L.C.	1,924,490
Taurus Mining Finance Fund L.L.C.	7,049,123
Taurus Mining Finance Fund II, L.P.	40,149,559
TerraCotta Credit Fund, L.P.	82,749,967
The Varde Private Debt Opportunities Fund (Onshore), L.P.	67,300,725
Diversifying Strategies	
Alphadyne Global Rates Fund II, Ltd.	388,461,667
AQR Multi-Strategy Fund XIV, L.P.	154,082,743
Brevan Howard Alpha Strategies Fund, L.P.	258,620,257
Brevan Howard Kankakee SP	86,158,166
Brevan Howard Systematic Trading Fund, L.P.	187,821,006
Bridgewater All Weather China, Ltd.	189,329,781
Capstone Vol (US), L.P.	439,365,345
Crabel Fund, L.P.	123,166,806
Graham Global Investment Fund I SPC Ltd.	247,633,753
Grosvenor Monarch Fund, L.L.C.	294,661,248
Grosvenor Monarch Fund Series B	145,163,485
Kirkoswald Global Macro Fund, L.P.	587,567,607
Magnetar Capital Annex A	15,315,225
Maniyar Macro Fund, L.P.	193,548,897
PDT Mosaic Offshore Holdings, L.L.C.	267,919,134
Taconic European Credit Dislocation Fund III, L.P.	65,961,966
Tilden Park Investment Fund, L.P.	161,728,847
Trend Macro Onshore, L.P.	324,506,982
Varadero International, Ltd.	314,902,677
Varadero Special Opportunities International, L.P.	76,430,806

Note: The list does not include managers terminated prior to June 30, 2022 with residual assets in the account.

SUPPLEMENTARY SCHEDULES

Top 10 U.S. Equity Holdings at June 30, 2022

Firm	Sector	Fair Value (USD)
Microsoft Corp.	Technology	$619,880,522
Apple, Inc.	Technology	570,876,684
Amazon.com, Inc.	Consumer	273,128,680
Alphabet, Inc. - class C	Communication	218,040,641
UnitedHealth Group, Inc.	Health Care	212,429,664
Alphabet, Inc. - class A	Communication	211,610,505
Tesla, Inc.	Consumer	156,287,987
Berkshire Hathaway, Inc.	Financials	152,976,655
Johnson & Johnson	Health Care	128,104,529
J.P. Morgan Chase & Co.	Financials	122,579,589
Total		$2,665,915,456

Sources: State Street Bank and Trust and TRS

Top 10 International Equity Holdings at June 30, 2022

Firm	Country	Fair Value (USD)
Roche Holding AG	Switzerland	$123,299,330
Novartis AG	Switzerland	92,165,453
Samsung Electronics LTD	Korea	86,525,860
Shell PLC	United Kingdom	74,569,048
Novo Nordisk A/S	Denmark	74,042,958
Taiwan Semiconductor Manufacturing Co Ltd	Taiwan	72,712,328
ASML Holding NV	Netherlands	72,466,027
Nestle SA	Switzerland	69,718,941
Accenture PLC	Ireland	68,714,766
GlaxoSmithKline PLC	United Kingdom	59,520,047
Total		$793,734,758

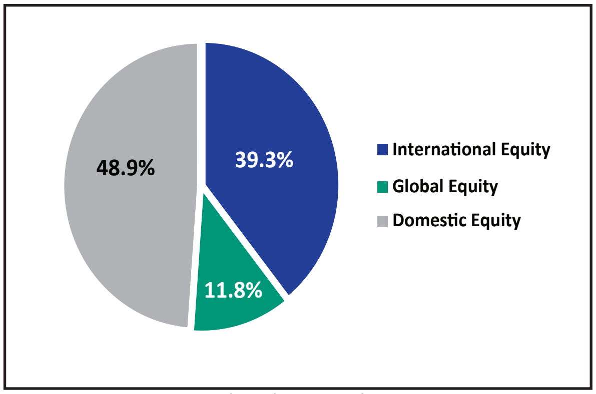
Sources: State Street Bank and Trust and TRS

Top 10 Income Holdings at June 30, 2022 (excludes commingled funds)

Security/position	Maturity Date	Interest Rate	Fair Value (USD)
United States Treasury Note/ Bond	1/31/2024	2.50%	$118,777,456
United States Treasury Note/ Bond	1/31/2024	0.88	72,624,023
United States Treasury Note/ Bond	4/30/2024	2.50	50,349,551
United States Treasury Floating Rate Note	4/30/2023	1.79	48,211,564
United States Treasury Floating Rate Note	1/31/2023	1.81	47,617,031
Bank of America Corp	12/20/2023	3.00	46,875,469
United States Treasury Floating Rate Note	10/31/2022	1.81	46,681,894
KeyBank NA/ Cleveland OH	1/3/2024	0.42	44,542,934
Brazil Letras do Tesouro Nacional	1/1/2024	0.01	40,712,259
United States Treasury Note/ Bond	10/31/2024	1.50	40,437,979
Total			$556,830,160

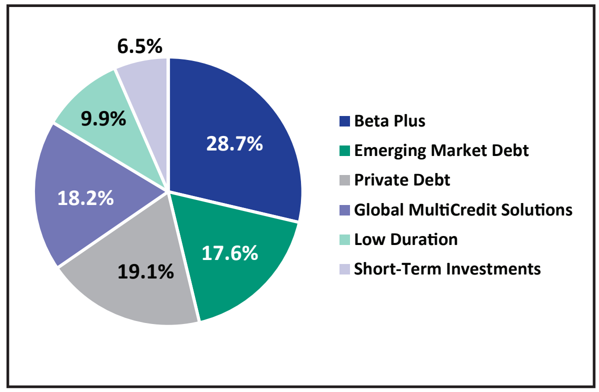
Sources: State Street Bank and Trust and TRS

Public Equity by Investment Type



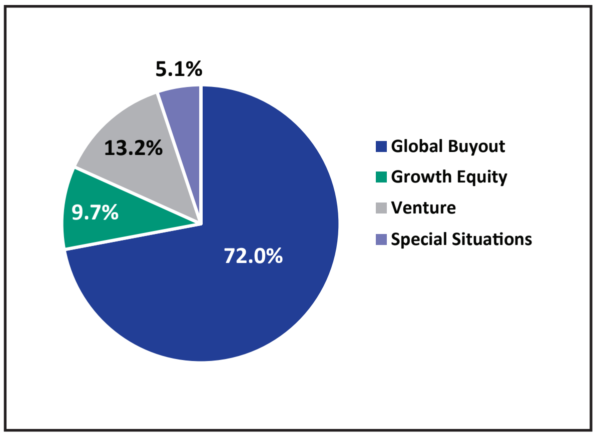
Sources: State Street Bank and Trust and TRS

Income by Investment Type



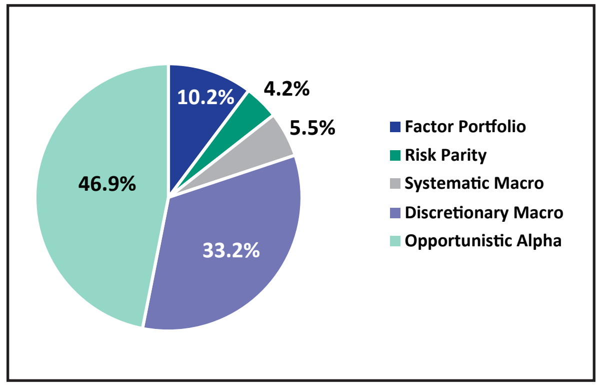
Sources: State Street Bank and Trust and TRS

Private Equity by Investment Type



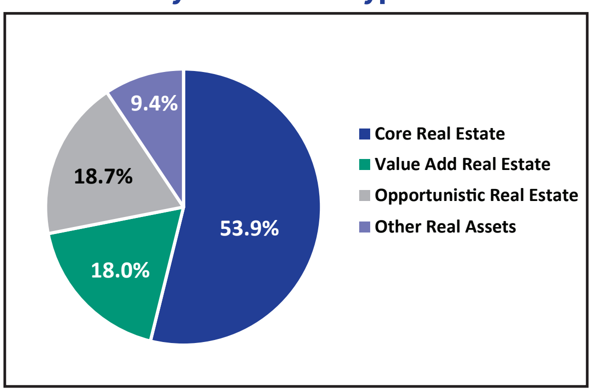
Sources: State Street Bank and Trust and TRS

Diversifying by Investment Type



Sources: State Street Bank and Trust and TRS

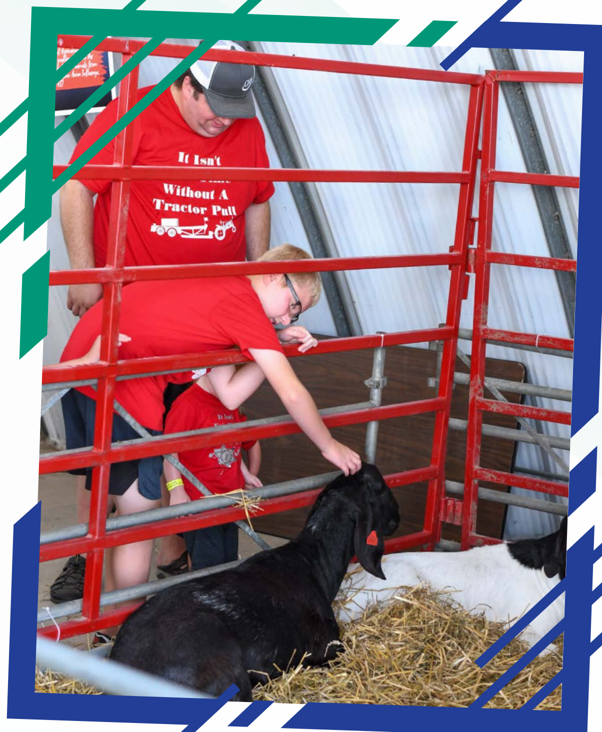
Real Assets by Investment Type



Sources: State Street Bank and Trust and TRS

Children visiting the Illinois State Fair have the opportunity to...

...milk a cow



...pet a goat

...and see what is involved daily in caring for livestock.

An annual, popular destination of the fair is the Future Farmers of America (FFA) Barnyard.

The butter cow has been the traditional agricultural centerpiece of every fair since 1921. Inspired by the fair's 2022 theme, "Grow with Us," sculptor Sarah Pratt included a farmer tending to sunflowers next to the cow. The iconic display is made of 800 pounds of recycled butter.

The Main Gate has welcomed agricultural students since 1910. The Main Gate was placed on the National Register of Historic Places in 1990.

ACTUARIAL

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November 14, 2022

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

ACTUARIAL CERTIFICATION

Dear Board Members:

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, 2022, 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, 2017, through June 30, 2020, presented at the August 2021 Board meeting, and the economic experience review presented at the August 2022 Board meeting. In our opinion, the actuarial assumptions as approved by the Board are reasonably related to the experience of and the expectations for 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 to the actuary the individual data for members of the System as of the prior valuation date. 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 impact on the valuation due to the census data that lags one year behind the valuation date has been studied and deemed immaterial. 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. Generally, this implies payments that are ultimately at least enough to cover normal cost, interest on the unfunded actuarial accrued liability, and the principal balance.** The funding policy adopted by the Board, referred to as the Board-Adopted Actuarial Funding Policy, meets this standard.

The valuation indicates that for the fiscal year ended June 30, 2022, the actuarial experience of TRS generated a net actuarial gain of $335 million. This gain is the net result of a $460 million gain due to investment return experience (on an actuarial basis, TRS experienced an investment loss of $5.2 billion on a fair value basis) and a $125 million (0.1% of the actuarial accrued liability) net loss due to demographic experience for fiscal 2022.

Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are prepared to meet regulatory, legislative and client requirements. Deterministic cost projections are based on a proprietary forecasting model. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

Actuarial Certification

In preparing the results presented in this report, we have relied upon information TRS staff 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 or Associates 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

By:

Matthew A. Strom, FSA, MAAA, EA	Tanya Dybal, FSA, MAAA, EA	David K. Nickerson, ASA, MAAA, EA
Senior Vice President and Actuary	Vice President and Actuary	Actuary

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 previous report prepared by Segal, Cheiron recommended some additional explanation of the new entrant assumption as well as additional information on the new entrant population used in projections. Recommendations were also made on the use of inactive vested buyout assumptions and the full-time future service accrual rate.

With regularity, Cheiron recommends the TRS Board annually review the economic assumptions for use in the valuation. The TRS Board acts on this recommendation every year with review and adoption of the investment rate of return and inflation assumptions.

Among the other assumptions, Cheiron recommended future stress testing on the impact of the state contribution.

The preliminary June 30, 2022 actuarial valuation prepared by Segal 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 adopted in the FY22 valuation are based on the 2021 experience study analysis. At the recommendation of the state actuary, the economic assumptions, investment return and inflation are reviewed by the TRS Board of Trustees annually for use in the next valuation.

INVESTMENT RETURN

The investment return rate is 7.0 percent per annum, compounded annually and net of investment expenses, including inflation at 2.50 percent and real return at 4.50 percent. This is the expected rate of return on investments first adopted effective June 30, 2016 and is also used to discount benefit payments. These individual components were adopted in the FY22 valuation.

SALARY INCREASES

Components of the salary increase assumption include:

- inflation of 2.50 percent and
- real wage growth (productivity).

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

Salary Increase Assumptions

Service	Male and Female
1 year	8.75%
2 years	7.00
3 years	6.75
4 years	6.50
5 years	6.25
10 years	5.25
15 years	4.75
20 years and above	3.75

For a member who works 34 years, the assumed average salary increase over the member's career is 4.73 percent per year. The actual average salary increase for teachers who were in full-time or regular part-time status at both June 30, 2020 and June 30, 2021 is 4.44 percent.

INFLATION

Inflation is assumed to be 2.50 percent per annum and is implicit in investment and earnings progression assumptions. This rate was adopted in the FY22 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 2021 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	30-33	34+
54	-%	7%	8%	45%
55	-	6	8	44
60	21	33	46	44
65	27	40	52	43
70	100	100	100	31
75	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 PubT-2010 mortality tables with adjustments as appropriate for TRS experience. The rates are used on a fully generational basis using projection table MP-2020.

For retirees, the PubT-2010 Retiree Mortality table is used with the following adjustments:

- female rates are multiplied by 91 percent for ages under 75 and 109 percent for ages 75 and older and
- male rates are multiplied by 105 percent for ages under 85 and 115 percent for 85 and older.

For disabled members, the PubNS-2010 Non-Safety Disabled Retiree Mortality table is used with no adjustments to male or female rates.

For beneficiaries, the Pub-2010 Contingent Survivor Mortality table is used with female rates multiplied by 98 percent for all ages and male rates multiplied by 110 percent for all ages.

For active and inactive members, the PubT-2010 Employee Mortality table is used with male and female rates multiplied by 90 percent for all ages.

DISABILITY

Here are the sample annual disability rates:

Disability Assumptions

Age	Male	Female
25	0.01%	0.02%
30	0.01	0.03
40	0.02	0.06
50	0.08	0.15
55	0.11	0.17
60	0.14	0.23
65	0.19	0.26

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	6.50%	6.25%	4.50%	4.50%
30	6.75	6.75	3.00	4.25
40	9.50	7.25	1.50	1.25
50	11.75	8.50	1.00	1.25
55	11.25	10.25	1.75	2.00
60	12.25	13.00	3.50	2.25
65	29.25	32.50	3.50	2.50

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
18%	8.0%

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	0.158 years
20	0.531 years
25	0.712 years
30	0.673 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	0.963 years
25	1.154 years
30	1.369 years
34	1.612 years
35 or more	None

POST-RETIREMENT INCREASES

Tier 1: 3%, compounded (statutory).

Tier 2: 1.25%, not compounded (adopted in 2022 valuation).

ACTUARIAL COST METHOD

The actuarial cost method required by the Illinois Pension Code is projected unit credit, which was adopted in the FY1989 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 (BUYOUTS)

Under the programs established by Public Act 100-0587 and extended to June 30, 2026 by Public Act 102-0718:

- 10 percent of eligible Tier 1 and Tier 2 future inactive members are assumed to participate in the Accelerated Pension Benefit Program (adopted in the FY22 valuation).

- 20 percent of new Tier 1 retirees are assumed to participate in the Accelerated Annual Increase Program.

The Accelerated Pension Benefit Program and Accelerated Annual Increase Program participation assumptions are based on the recent TRS actuarial experience review during the period of June 30, 2017 through June 30, 2020.

Of the original $1 billion bond authorization, TRS was allotted $650 million. From the inception of the buyout programs through FY22, TRS expended approximately $572 million from bond proceeds. An additional $1 billion bond authorization was signed into law in PA 102 -718 to fund the "buyout" programs.

Buyouts are assumed to be paid through June 30, 2026 with additional funds being allocated to TRS to pay for all assumed buyout payments, as needed.

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 2021, TRS actuaries conducted an analysis for the three years ending June 30, 2020. Based on their study, the actuaries recommended changes in assumptions that were first adopted by the TRS Board of Trustees in the June 30, 2021 actuarial valuation.

The following changes in assumptions were adopted by the TRS Board of Trustees in August 2021:

- The rates of individual salary increase were decreased based on plan experience.
- The new entrant pay increase assumption was changed to equal the inflation assumption.
- The average COLA and rate of increase in the pensionable salary cap applicable to Tier 2 members was decreased based on the change in the inflation assumption.
- The percent of retirees assumed to receive severance pay and the average severance payment amount were decreased.
- The healthy, disabled, and beneficiary post-retirement and pre-retirement mortality assumption was updated to use the recently published PubT-2010 Mortality Tables with adjusted rate multipliers at various ages for males and females to better reflect plan experience.
- The mortality improvement scale was updated from Scale MP-2017 to Scale MP-2020.
- The retirement rates for active Tier 1 members were adjusted based on plan experience. The previous service groups of 30 to 31 years of service and 32 to 33 years of service were updated to 30 to 33 years of service.
- The termination rates were decreased based on plan experience.
- The disability rates were decreased based on plan experience.
- The sick leave service credit rates were adjusted based on plan experience.
- The optional service purchase rates were adjusted based on plan experience.
- The future service accrual rates were increased based on plan experience.
- The Automatic Annual Increase buyout participation rate was increased for eligible retiring Tier 1 members based on plan experience.
- The Inactive Vested buyout participation rate was decreased for eligible inactive vested members based on plan experience.
- The period which buyouts, at that time of the experience study, were assumed to be paid was extended from FY22 to FY24. Since that time, the buyout programs were extended again from FY24 to FY26.

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.

All actuarial assumptions used to prepare the actuarial valuation are reviewed every three years. The last review, called an actuarial experience analysis, was conducted in 2021. The major economic assumptions are reviewed every year. The state actuary recommended this more frequent review.

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

Actuarial Valuation ($ thousands)

	Year Ended June 30, 2022
Based on actuarial value of assets	
Total actuarial accrued liability	$143,523,731
Less actuarial value of assets*	62,910,402
Unfunded liability	**$80,613,329**
Funded ratio*	43.8%
Based on fair value of assets	
Total actuarial accrued liability	$143,523,731
Less assets at fair value	62,833,626
Unfunded liability	**$80,690,105**
Funded ratio	43.8%

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

ANALYSIS OF FINANCIAL EXPERIENCE: RECONCILIATION OF UNFUNDED LIABILITY

The $0.7 billion net increase in the 2022 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 $610 million.

Actuarial gains and losses occurred under the other assumptions. The most significant gain was on investments. Other actuarial gains occurred under the assumptions for disabilities, mortality, new entrants and buyouts, meaning that experience was more favorable (less costly) than assumed. The loss of $223 million in the "other" category is a balancing item.

Actuarial losses occurred under the assumptions for salary increases, retirements other than expected, terminations and rehires (members coming back into teaching service), meaning that experience was less favorable (more costly) than assumed.

The net effect of the actuarial gains and losses was a decrease in the unfunded liability of $335 million.

Increases in the unfunded liability occurred because of changes in actuarial assumptions adopted in the

June 30, 2022 actuarial valuation. The net effect of the assumption changes was an increase in the unfunded liability of $404 million.

In summary, the $0.7 billion increase in the unfunded liability is the net effect of the $0.6 billion employer cost in excess of contributions, the $0.3 billion gain due to experience and the $0.4 billion increase due to assumption changes.

Reconciliation of Unfunded Liability

Reconciliation of Unfunded Actuarial Accrued Liability	Year Ended June 30, 2022
Unfunded liability at beginning of year	**$79,934,351,951**
Additions	
Employer cost in excess of contributions	610,043,719
Experience (gain)/loss from:	
Investment (gain)/loss on actuarial value of assets*	(459,975,183)
Salaries for continuing active members	32,828,461
Retirements other than expected	12,528,909
Disabilities other than expected	(18,105,257)
Terminations other than expected	54,266,505
Mortality other than expected	(146,302,767)
Rehires	35,416,877
New entrants	(3,326,783)
Buyout experience	(65,234,112)
Other	223,011,784
Net experience (gain)	**(334,891,566)**
Changes in actuarial assumptions	403,824,677
Net increase in unfunded liability	**678,976,830**
Unfunded liability at end of year	**$80,613,328,781**

** Assets were expected to earn 7.0 percent during the year ended June 30, 2022. This item is the difference between the expected and the actual return on an actuarial basis.*

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 to the legislative and executive branches 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 estimate of the annual 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 the most commonly used method in the public sector. Entry age would assign costs more evenly over an employee's normal career. It would replace the projected unit credit actuarial cost method that is required under Illinois 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 FY1996. 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 when debt service on the bonds is repaid, 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 FY23 certified state contributions are based on the June 30, 2021 actuarial valuation and the FY24 certifications are based on the June 30, 2022 actuarial valuation. The state actuary will review the proposed certifications for FY24 as well as the preliminary June 30, 2022 valuation. Final certifications for FY24 are due Jan. 15, 2023 pursuant to Public Act 97-0674.

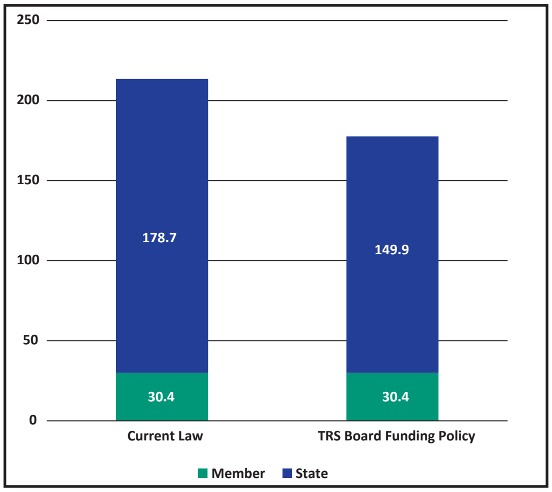
The following table shows funding requirements under the statutory funding plan and the TRS Board of Trustee's funding plan that was adopted in 2015.

FY23 & FY24 State Contribution Requirements

	FY23 Requirements	FY24 Requirements
Based on Statutory Funding Plan		
Benefit Trust Reserve	$5,893,732,209	$6,043,154,650
Minimum Annuity Reserve	300,000	300,000
Total State Contribution	$5,894,032,209	$6,043,454,650
Based on TRS Board Funding Policy		
Benefit Trust Reserve	$9,101,333,224	$9,589,816,087
Minimum Annuity Reserve	300,000	300,000
Total State Contribution	$9,101,633,224	$9,590,116,087
Employer Normal Cost Rate		
Tier 1	14.58%	15.13%
Tier 2	(1.34%)	(1.03%)
Combined	10.49%	10.60%

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 from FY24 through FY45 would be $28.7 billion lower than under current law.

State and Member Required Contributions FY24-FY45 ($ Billions)



TESTS OF FINANCIAL CONDITION

The funded ratio shows the percentage of the accrued liability covered by actuarial value of assets and the fair 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	Fair Value	Actuarial Value	Fair Value	Actuarial Value	Fair Value
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
2019	131,456,969	53,391,193	53,262,789	78,065,776	78,194,180	40.6	40.5
2020	135,598,547	54,890,976	52,316,478	80,707,571	83,282,069	40.5	38.6
2021	138,914,275	58,979,923	64,212,505	79,934,352	74,701,770	42.5	46.2
2022	**143,523,731**	**62,910,402**	**62,833,626**	**80,613,329**	**80,690,105**	**43.8**	**43.8**

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
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
2019	10,450,452	78,065,776	747.0
2020	10,827,439	80,707,571	745.4
2021	11,120,776	79,934,352	718.8
2022	**11,647,248**	**80,613,329**	**692.1**

** 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	Active Member Contributions (1)	Participants Currently Receiving Benefits) (2)	Active Members Employer Portion (3)	Actuarial Value of Assets	(1)	(2)	(3)
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	-
2019	10,474,097	85,788,806	35,194,066	53,391,193	100	50	-
2020	10,902,747	88,185,983	36,509,817	54,890,976	100	50	-
2021	11,320,352	88,788,971	38,804,952	58,979,923	100	54	-
2022	**11,804,784**	**90,534,637**	**41,184,310**	**62,910,402**	**100**	**56**	**-**

OTHER INFORMATION

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

Year Ended June 30	State Contributions[1]	Federal and Employer Contributions[2]	Total	Actuarially Determined Contribution[3]	Percentage Contributed	Annual Required Contribution per State Statute	Percentage Contributed[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	4,178,744	100.0
2019	4,465,578	87,707	4,553,285	7,429,037	61.3	4,554,862	100.0
2020	4,763,078	92,038	4,855,116	7,988,612	60.8	4,923,519	98.6
2021	5,140,337	97,082	5,237,419	8,441,258	62.0	5,237,798	100.0
2022	**5,866,530[5]**	**120,441**	**5,986,971**	**8,947,919**	**66.9**	**5,791,571**	**103.4**

1. *Actual state contribution amounts paid, reflecting recertifications which may not agree with original certifications in actuarial reports. Minimum benefit reimbursements are excluded.*
2. *Excess sick leave and penalty employer contributions are excluded. Beginning in FY18, the federal contribution rate for salaries paid from federal funds is the same as the total employer normal cost rate. Previously, it was the same as the state contribution rate.*
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 of Trustees funding policy.*
4. *Actual contributions varied slightly from contributions that are required by statute mainly because of differences between estimated and actual federal contributions.*
5. *State contributions for year ended June 30, 2022 reflect a one-time contribution of $172.8 million appropriated from the Pension Stabilization Fund per PA 102-0696.*

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
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
2019	122,423	5,238	3,362	124,299	6,915,297,528	4.3	55,634	2.7
2020	124,299	5,151	3,523	125,927	7,183,690,664	3.9	57,046	2.5
2021	125,927	5,502	3,911	127,518	7,461,806,091	3.9	58,516	2.6
2022	**127,518**	**5,729**	**3,781**	**129,466**	**7,750,208,525**	**3.9**	**59,863**	**2.3**

Source: TRS

Year Ended June 30	Amount Added to Rolls: Annual Benefit Increases	Amount Added to Rolls: New Benefit Recipients	Amount Removed from Rolls
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
2019	194,545,787	233,753,123	142,606,520
2020	203,914,182	217,817,526	153,338,572
2021	208,410,910	252,691,913	182,987,395
2022	**217,281,781**	**259,338,852**	**188,218,199**

Source: TRS

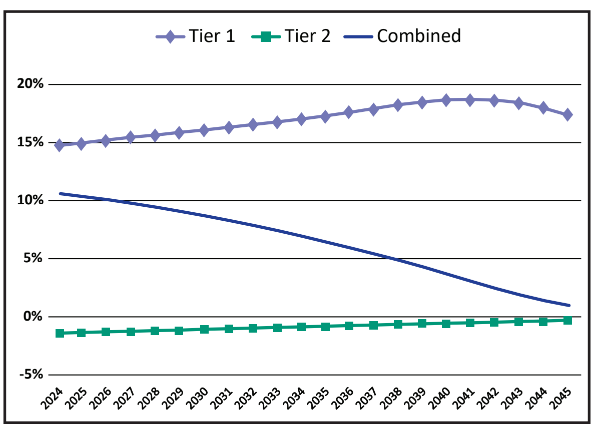
FUNDING ANALYSIS BY TIER

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 following chart shows that while the combined employer normal cost of both tiers in 2022 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. In the meantime, the cost of Tier 1, which is a closed group, continues to increase, until 2042, 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

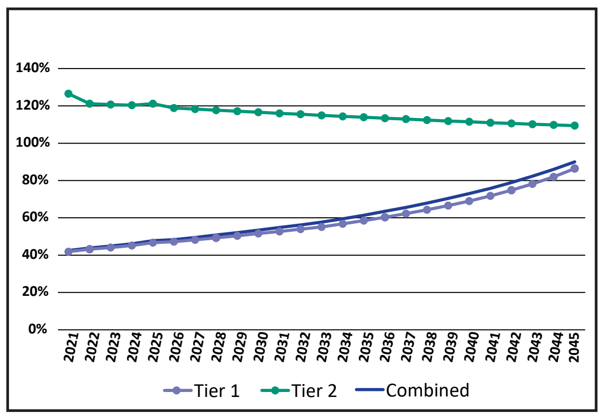


Note: Combined rate includes administrative expenses.
Source: 2019 valuation for 2021 data, 2020 valuation for 2022 data, 2022 valuation for subsequent years.

Under the 50-year funding plan, TRS will attain a funded ratio of 90 percent by 2045. The following chart illustrates what the funded ratios would be 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 2028.

By 2045, Tier 1 would be 86 percent funded and Tier 2 would be 109 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



Source: 2019 valuation for 2021 data, 2020 valuation for 2022 data, 2022 valuation for subsequent years.

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

Years of Service		2022	2021	2020	2019
Under 5	**Members**	**28,141**	**27,043**	**26,499**	**26,111**
	Salary	$53,146	$53,591	$51,260	$51,835
5-9	**Members**	**27,006**	**27,577**	**27,309**	**26,264**
	Salary	$64,545	$63,366	$61,110	$60,626
10-14	**Members**	**23,197**	**24,514**	**25,861**	**28,322**
	Salary	$75,681	$74,888	$73,590	$73,266
15-19	**Members**	**25,657**	**25,545**	**25,186**	**24,459**
	Salary	$88,801	$87,256	$85,800	$85,131
20-24	**Members**	**19,932**	**19,018**	**17,618**	**16,209**
	Salary	$100,358	$97,906	$95,974	$94,599
25-29	**Members**	**11,482**	**10,930**	**10,520**	**10,038**
	Salary	$108,662	$105,660	$103,541	$101,340
30-34	**Members**	**4,510**	**4,354**	**4,193**	**3,950**
	Salary	$115,454	$112,524	$109,478	$106,097
35 +	**Members**	**307**	**326**	**356**	**353**
	Salary	$121,506	$119,173	$116,714	$112,963
	Total Members	**140,232**	**139,307**	**137,542**	**135,706**
	Salary	$79,002	$77,577	$76,027	$74,518
	% Change salary	**1.8%**	**2.0%**	**2.0%**	**2.0%**
	Total payroll full & part-time	**$11,078,509,648**	**$10,807,084,561**	**$10,456,942,174**	**$10,112,568,797**
	Number of Employers	**992**	**991**	**990**	**990**

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.

2018	2017	2016	2015	2014	2013
25,959	**26,486**	**26,767**	**26,698**	**25,191**	**24,812**
$50,568	$49,935	$49,464	$47,796	$46,845	$46,058
25,831	**26,436**	**27,845**	**29,798**	**33,028**	**34,682**
$59,615	$59,150	$59,276	$58,935	$58,540	$58,027
29,465	**29,617**	**29,395**	**29,214**	**28,747**	**28,503**
$72,008	$71,412	$71,140	$70,589	$70,233	$69,686
24,304	**23,936**	**22,894**	**21,421**	**19,917**	**19,406**
$84,065	$82,745	$81,868	$80,737	$79,921	$79,295
15,590	**14,728**	**14,120**	**13,877**	**13,562**	**12,280**
$93,379	$92,035	$90,942	$89,591	$88,037	$86,235
8,786	**8,254**	**8,087**	**7,908**	**7,827**	**7,913**
$99,102	$97,624	$96,157	$94,510	$93,016	$91,735
3,976	**3,979**	**3,936**	**3,970**	**3,941**	**4,247**
$105,266	$104,652	$102,896	$100,785	$98,807	$96,966
379	**453**	**592**	**731**	**809**	**889**
$111,104	$110,576	$107,826	$105,372	$103,533	$101,293
134,290	**133,889**	**133,636**	**133,617**	**133,022**	**132,732**
$73,028	$71,773	$70,868	$69,538	$68,556	$67,558
1.7%	**1.3%**	**1.9%**	**1.4%**	**1.5%**	**1.3%**
$9,806,930,120	**$9,609,615,197**	**$9,470,516,048**	**$9,291,458,946**	**$9,119,456,232**	**$8,967,108,456**
990	**989**	**992**	**1,006**	**1,013**	**1,019**

Average Annual Salary and Age for Active Members by Years of Service as of June 30, 2022

			Years of Service			
Age		Subs	Under 5	5-9	10-14	15-19
20-24	**Members**	**2,844**	**3,968**	**-**	**-**	**-**
	Salary	$5,953	$46,185	-	-	-
25-29	**Members**	**2,467**	**9,663**	**3,906**	**-**	**-**
	Salary	$7,797	$51,384	$58,979	-	-
30-34	**Members**	**1,836**	**4,390**	**9,925**	**3,301**	**-**
	Salary	$6,513	$54,014	$63,790	$71,546	-
35-39	**Members**	**2,470**	**3,017**	**4,947**	**9,631**	**4,451**
	Salary	$7,048	$55,432	$66,183	$76,275	$85,983
40-44	**Members**	**3,190**	**2,669**	**3,134**	**4,271**	**10,806**
	Salary	$7,100	$55,696	$67,407	$77,356	$89,835
45-49	**Members**	**2,894**	**1,763**	**2,130**	**2,497**	**4,375**
	Salary	$7,436	$56,631	$66,898	$76,343	$90,837
50-54	**Members**	**2,803**	**1,310**	**1,621**	**1,835**	**2,986**
	Salary	$7,369	$57,184	$67,301	$75,372	$88,626
55-59	**Members**	**2,470**	**790**	**821**	**1,105**	**1,975**
	Salary	$6,791	$64,466	$66,588	$75,256	$86,436
60-64	**Members**	**1,975**	**411**	**379**	**453**	**853**
	Salary	$7,155	$66,038	$66,794	$76,047	$85,711
65-69	**Members**	**1,376**	**128**	**117**	**82**	**188**
	Salary	$7,171	$61,516	$66,654	$75,730	$90,638
70-74	**Members**	**743**	**27**	**25**	**21**	**20**
	Salary	$7,379	$64,586	$61,281	$76,291	$86,714
Over 74	**Members**	**266**	**5**	**1**	**1**	**3**
	Salary	$8,187	$48,829	$58,780	$44,047	$85,991
	Total Members	**25,334**	**28,141**	**27,006**	**23,197**	**25,657**
	Salary	$7,058	$53,146	$64,545	$75,681	$88,801

Source: TRS

	Average Age	Average Years of Service	Members
Full and part-time members	43	14	140,232
Substitutes	45	4	25,334
All	43	11	165,566

Years of Service							
20-24	25-29	30-34	35-39	40-44	45-49	50+	Full & Part-time Member Totals
-	**-**	**-**	**-**	**-**	**-**	**-**	**3,968**
-	-	-	-	-	-	-	$46,197
-	**-**	**-**	**-**	**-**	**-**	**-**	**13,569**
-	-	-	-	-	-	-	$53,576
-	**-**	**-**	**-**	**-**	**-**	**-**	**17,616**
-	-	-	-	-	-	-	$62,808
-	**-**	**-**	**-**	**-**	**-**	**-**	**22,046**
-	-	-	-	-	-	-	$73,117
3,992	**-**	**-**	**-**	**-**	**-**	**-**	**24,872**
$98,965	-	-	-	-	-	-	$82,668
8,927	**2,306**	**-**	**-**	**-**	**-**	**-**	**21,998**
$101,506	$108,183	-	-	-	-	-	$90,280
4,064	**6,440**	**1,793**	**-**	**-**	**-**	**-**	**20,049**
$100,643	$108,707	$113,494	-	-	-	-	$94,745
1,992	**2,118**	**2,408**	**129**	**-**	**-**	**-**	**11,338**
$99,063	$110,213	$117,054	$126,808	-	-	-	$96,000
778	**499**	**256**	**102**	**21**	**-**	**-**	**3,752**
$96,047	$104,708	$114,522	$116,908	$121,791	-	-	$88,164
149	**102**	**37**	**14**	**14**	**3**	**-**	**834**
$98,692	$105,660	$113,420	$107,272	$137,493	$120,458	-	$86,798
27	**13**	**12**	**7**	**4**	**7**	**3**	**166**
$113,652	$99,770	$112,071	$107,809	$128,355	$116,710	$96,262	$88,533
3	**4**	**4**	**1**	**-**	**-**	**2**	**24**
$92,231	$89,755	$119,934	$78,104	-	-	$111,012	$84,189
19,932	**11,482**	**4,510**	**253**	**39**	**10**	**5**	**140,232**
$100,358	$108,662	$115,454	$121,017	$128,101	$117,834	$102,162	$79,002

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 15-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 pages 106-107 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. The accelerated benefit programs are discussed on pages 90-91. 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.

Exhibitors at the 4-H Livestock Auction during the Kankakee County Fair.

Kankakee County Fair

The Kankakee County Fair was first held in 1856 and throughout its history has played host to annual shows and competitions featuring 4-H clubs from throughout the area. The 4-H activities provide young people with life-skill experiences in livestock management, animal nutrition and science, public speaking, time management and leadership skills.

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 the average of the four highest consecutive annual salary rates within the last 10 years of creditable service with one exception. Public Act 102-0016 removes the consecutive years requirement for members who are retiring on or after June 1, 2021 and the 2020-21 school year is used in the member's final average salary. The final average salary will be based on the four highest years within the last 10 years of creditable service. 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, 2023, 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 FY22, 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 FY22, members contributed 0.90% 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.

(continued)

Accelerated Benefit Programs (temporary)	Until June 30, 2026, inactive members with five years of TRS service can take a lump-sum payment of 60% of the present value of their future benefit payments. Buyout payments are contingent upon sufficient bond proceeds being available. Until June 30, 2026, retiring members can elect to receive 70% of the present value of the difference between the current 3% compounded annual increase that starts no earlier than age 61 and a 1.5% noncompounded annual increase that starts no earlier than age 67. Buyout payments are contingent upon sufficient bond proceeds being available.

	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 FY22 Tier 2 limit was $119,892.42. The final average salary is based on the member's highest average salary earned during eight consecutive years out of the last 10 years of service with one exception. Public Act 102-0016 removes the consecutive years requirement for members who are retiring on or after June 1, 2021 and the 2020-21 school year is used in the member's final average salary. The final average salary will be based on the eight highest years within the last 10 years of creditable service. 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 FY22, Tier 2 members also contributed 9.0% of pay, with components designated for the same to TRS 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, 2026, inactive members with 10 years of TRS service can take a lump-sum payment of 60% of the present value of their future benefit payments. Buyout payments are contingent upon sufficient bond proceeds being available.

Red Bud FFA students accepting the FFA Fun Night championship award.

A 4-H teen teacher makes a sheep presentation to a preschool group.

The Monroe County Fair Queen and Little Miss with a Jr. Exhibitor and the reserve champion steer.

Monroe County Fair

In 1948, the vocational agriculture teachers at Waterloo, Columbia, Valmeyer and Red Bud High Schools, along with interested farmers, formed the Monroe County Fair to hold an annual "educational and agricultural fair exhibition with special attention to junior exhibitors." This year, the Junior and 4-H livestock shows featured 3,800 cattle, swine, sheep, dairy, poultry, goat, rabbit and horse entries. The student exhibitors are encouraged and led by high school agriculture instructors, University of Illinois Extension staff members, active 4-H members and alumni of the Future Farmers of America and 4-H.

It's almost showtime for a brother and sister trimming one of their goats.

STATISTICAL

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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 112-113

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 114

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 114

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 115

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 – Pages 116-117

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

Benefit Recipients by Type and Summary Statistics, All Benefit Recipients – Page 118

This schedule shows counts by benefit type and range. Additional tables show averages by benefit type and retirements by subtype.

Average Benefit Payments For New Retirees – Page 119

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.

Medians for Retirees – Page 119

This schedule shows the median age, median monthly amount, median service credit and retiree count for all and new retirees.

Participating Employers – Page 120

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)

	2022	2021	2020	2019
Additions				
Member contributions*	$1,072,639	$1,023,532	$994,400	$963,972
State of Illinois	5,866,800	5,140,648	4,813,452	4,466,021
Employer contributions**	120,876	97,594	92,658	88,514
Investment income (loss) net of expenses	(743,042)	13,046,154	275,669	2,617,831
Total additions to/reductions from plan net position	**6,317,273**	**19,307,928**	**6,176,179**	**8,136,338**
Deductions				
Benefit payments	7,607,019	7,323,949	7,035,307	6,745,544
Refunds	62,557	64,194	64,217	73,216
Administrative expenses	26,576	23,758	22,966	24,336
Total deductions from plan net position	**7,696,152**	**7,411,901**	**7,122,490**	**6,843,096**
Changes in net position restricted for pensions				
Beginning of year	64,212,505	52,316,478	53,262,789	51,969,547
Net increase (decrease)	(1,378,879)	11,896,027	(946,311)	1,293,242
End of year	**$62,833,626**	**$64,212,505**	**$52,316,478**	**$53,262,789**

** 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)

	2022	2021	2020	2019
Type of benefit				
Retirement	$7,188,188	$6,935,054	$6,672,267	$6,405,908
Survivor	386,985	357,078	329,872	306,503
Disability	31,847	31,817	33,168	33,133
Total benefits	**$7,607,020**	**$7,323,949**	**$7,035,307**	**$6,745,544**
Type of refund				
Withdrawals	18,367	16,927	19,150	23,358
Death benefits and excess contribution refunds paid to survivors	21,568	21,769	18,372	21,172
2.2 and optional service	9,264	10,587	11,082	11,132
Survivor contributions refunded to retirees	9,190	9,498	8,791	8,225
Early Retirement Option and other	4,168	5,413	6,822	9,329
Total refunds	**$62,557**	**$64,194**	**$64,217**	**$73,216**

2018	2017	2016	2015	2014	2013
$938,037	$929,130	$951,809	$935,451	$928,746	$921,423
4,095,125	3,986,364	3,742,469	3,377,665	3,438,383	2,703,312
84,633	149,495	148,041	145,591	158,335	157,179
4,049,272	5,520,453	(44,103)	1,770,550	6,782,031	4,561,768
9,167,067	**10,585,442**	**4,798,216**	**6,229,257**	**11,307,495**	**8,343,682**
6,458,710	6,152,868	5,848,180	5,536,399	5,225,207	4,893,084
92,925	285,138	83,027	88,638	95,456	88,398
21,550	22,729	22,968	21,687	21,218	20,257
6,573,185	**6,460,735**	**5,954,175**	**5,646,724**	**5,341,881**	**5,001,739**
49,375,665	45,250,957	46,406,916	45,824,382	39,858,768	36,516,825
2,593,882	4,124,708	(1,155,959)	582,534	5,965,614	3,341,943
$51,969,547	**$49,375,665**	**$45,250,957**	**$46,406,916**	**$45,824,382**	**$39,858,768**

2018	2017	2016	2015	2014	2013
$6,140,877	$5,857,968	$5,575,130	$5,281,221	$4,986,156	$4,670,385
285,068	263,430	242,578	224,779	208,424	192,390
32,765	31,470	30,472	30,399	30,627	30,309
$6,458,710	**$6,152,868**	**$5,848,180**	**$5,536,399**	**$5,225,207**	**$4,893,084**
27,356	30,487	26,797	29,789	33,128	30,194
20,263	19,135	17,094	17,881	20,633	16,764
13,247	14,185	15,074	17,855	19,331	20,053
8,839	9,410	10,458	10,197	10,990	10,780
23,220	211,921	13,604	12,916	11,374	10,607
$92,925	**$285,138**	**$83,027**	**$88,638**	**$95,456**	**$88,398**

Employee and Employer Contribution Rates, Last 10 Fiscal Years

Fiscal Year	Employee Rate (%)[1]	Employer Rate (%) State[2]	School Districts for 2.2 Formula	School Districts from Federal Sources[3]	Total[4]
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
2019	9.00	41.93	0.58	0.27	42.77
2020	9.00	43.94	0.58	0.28	44.80
2021	9.00	45.84	0.58	0.29	46.71
2022	**9.00**	**49.63**	**0.58**	**0.28**	**50.49**

1. *Employee rate decreased to 9.00 percent in FY17 because the ERO program was discontinued.*
2. *State contributions rates reflect recertifications and may not agree with original certifications in actuarial reports.*
3. *Beginning in FY18, the federal contribution rate for salaries paid from federal funds is the same as the total employer normal cost rate. Previously, it was the same as the state contribution rate.*
4. *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
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
2019	115,839	71.1	47,188	28.9	163,027	100.0
2020	112,004	68.7	51,111	31.3	163,115	100.0
2021	105,062	66.1	53,965	33.9	159,027	100.0
2022	**103,163**	**62.3**	**62,403**	**37.7**	**165,566**	**100.0**

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

Retired Members by Years of Service and Years in Retirement as of June 30, 2022*

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**	**227**	**235**	**250**	**376**	**551**	**540**	**663**	**782**	**21**	**6**	**4**	**3,655**	**61**
	Avg. current benefit	$267	$891	$1,564	$2,631	$3,613	$4,808	$6,169	$7,149	$9,128	$11,253	$12,442	$4,440	
	Avg. orig. benefit	$267	$887	$1,562	$2,624	$3,606	$4,803	$6,161	$7,149	$9,128	$11,253	$12,442	$4,435	
1 – 4	**Retirees**	**773**	**1,381**	**1,382**	**1,743**	**2,395**	**2,216**	**2,569**	**3,231**	**193**	**41**	**9**	**15,933**	**63**
	Avg. current benefit	$265	$809	$1,569	$2,621	$3,612	$4,858	$6,255	$7,075	$8,309	$10,460	$12,656	$4,302	
	Avg. orig. benefit	$249	$760	$1,473	$2,469	$3,435	$4,620	$5,981	$6,900	$7,769	$9,929	$12,300	$4,125	
5 – 9	**Retirees**	**1,090**	**1,977**	**2,033**	**2,256**	**3,439**	**3,143**	**3,637**	**4,678**	**465**	**81**	**12**	**22,811**	**68**
	Avg. current benefit	$341	$903	$1,765	$2,845	$4,027	$5,363	$6,848	$7,620	$8,627	$10,305	$14,942	$4,754	
	Avg. orig. benefit	$278	$734	$1,439	$2,334	$3,315	$4,416	$5,631	$6,289	$7,065	$8,421	$12,160	$3,912	
10 –14	**Retirees**	**980**	**2,011**	**1,815**	**1,698**	**2,641**	**2,649**	**4,156**	**6,158**	**432**	**61**	**8**	**22,609**	**72**
	Avg. current benefit	$378	$953	$1,766	$2,961	$4,138	$5,611	$7,259	$7,914	$8,831	$9,913	$13,118	$5,296	
	Avg. orig. benefit	$269	$734	$1,254	$2,106	$2,953	$4,008	$5,179	$5,681	$6,378	$7,138	$9,234	$3,789	
15 – 19	**Retirees**	**847**	**1,129**	**1,131**	**1,098**	**2,286**	**2,550**	**10,193**	**4,401**	**304**	**45**	**2**	**23,986**	**75**
	Avg. current benefit	$368	$889	$1,765	$2,932	$4,078	$5,687	$7,742	$8,533	$8,762	$9,339	$12,663	$6,251	
	Avg. orig. benefit	$225	$544	$1,081	$1,805	$2,514	$3,498	$4,765	$5,280	$5,412	$5,732	$7,859	$3,852	
20 – 24	**Retirees**	**588**	**558**	**531**	**500**	**1,344**	**1,582**	**5,464**	**2,622**	**153**	**13**	**1**	**13,356**	**79**
	Avg. current benefit	$395	$922	$1,597	$2,643	$3,789	$5,476	$7,675	$8,320	$7,909	$9,028	$8,881	$6,122	
	Avg. orig. benefit	$208	$486	$848	$1,410	$2,031	$2,938	$4,187	$4,463	$4,229	$4,811	$4,982	$3,311	
25 –29	**Retirees**	**218**	**283**	**228**	**217**	**411**	**728**	**1,159**	**2,363**	**3,613**	**3**	**-**	**9,223**	**84**
	Avg. current benefit	$347	$901	$1,324	$1,827	$2,624	$3,378	$4,407	$6,054	$6,956	$7,487	-	$5,327	
	Avg. orig. benefit	$157	$409	$591	$825	$1,202	$1,522	$1,967	$2,699	$3,071	$3,330	-	$2,367	
30 – 34	**Retirees**	**54**	**112**	**198**	**181**	**613**	**567**	**727**	**577**	**43**	**-**	**1**	**3,073**	**90**
	Avg. current benefit	$312	$765	$1,340	$2,046	$2,867	$3,929	$5,492	$6,793	$6,801	-	$5,105	$4,209	
	Avg. orig. benefit	$123	$294	$526	$807	$1,137	$1,568	$2,184	$2,739	$2,753	-	$2,067	$1,681	
35 – 39	**Retirees**	**22**	**20**	**48**	**70**	**234**	**213**	**225**	**135**	**4**	**-**	**-**	**971**	**94**
	Avg. current benefit	$297	$560	$1,154	$1,865	$2,318	$3,337	$4,768	$6,277	$5,239	-	-	$3,500	
	Avg. orig. benefit	$102	$182	$388	$643	$795	$1,158	$1,663	$2,171	$1,838	-	-	$1,212	
40 – 44	**Retirees**	**2**	**4**	**8**	**15**	**45**	**32**	**27**	**18**	**2**	**-**	**-**	**153**	**99**
	Avg. current benefit	$200	$377	$886	$1,300	$1,760	$2,607	$3,118	$4,127	$4,161	-	-	$2,339	
	Avg. orig. benefit	$60	$43	$251	$375	$525	$784	$964	$1,253	$1,241	-	-	$704	
45 – 49	**Retirees**	**1**	**-**	**-**	**-**	**2**	**3**	**1**	**1**	**-**	**-**	**-**	**8**	**102**
	Avg. current benefit	$244	-	-	-	$1,229	$1,943	$3,544	$4,448	-	-	-	$2,065	
	Avg. orig. benefit	$64	-	-	-	$242	$516	$941	$1,255	-	-	-	$537	
	Total retirees	**4,802**	**7,710**	**7,624**	**8,154**	**13,961**	**14,223**	**28,821**	**24,966**	**5,230**	**250**	**37**	**115,778**	
	Avg. current benefit	**$344**	**$895**	**$1,683**	**$2,755**	**$3,817**	**$5,184**	**$7,160**	**$7,664**	**$7,447**	**$9,983**	**$13,169**	**$5,273**	
	Avg. orig. benefit	**$245**	**$662**	**$1,254**	**$2,109**	**$2,814**	**$3,738**	**$4,759**	**$5,427**	**$4,063**	**$7,690**	**$10,892**	**$3,643**	

** Represents monthly benefit*

Demographics of Benefit Recipients and Active Members as of June 30, 2022 (excludes inactive members)

	Retirees			Disability Benefit Recipients			Survivors		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
Under 20	-	-	-	-	-	-	49	-	49
20-24	-	-	-	-	-	-	-	12	12
25-30	-	-	-	-	2	2	-	-	-
30-34	-	-	-	1	2	3	-	5	5
35-39	-	1	1	1	15	16	8	7	15
40-44	-	-	-	3	48	51	9	30	39
45-49	-	-	-	9	67	76	27	49	76
50-54	4	6	10	26	120	146	50	65	115
55-59	1,029	3,119	4,148	25	147	172	74	124	198
60-64	2,854	10,756	13,610	31	86	117	180	295	475
65-69	4,609	17,990	22,599	17	97	114	303	543	846
70-74	7,521	23,349	30,870	18	89	107	672	1,345	2,017
75-79	7,425	15,450	22,875	17	54	71	768	1,782	2,550
80-84	3,958	7,825	11,783	4	25	29	612	1,883	2,495
85-89	2,140	4,029	6,169	4	18	22	515	1,582	2,097
90+	1,032	2,681	3,713	2	11	13	395	1,365	1,760
Total:	**30,572**	**85,206**	**115,778**	**158**	**781**	**939**	**3,662**	**9,087**	**12,749**

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
2	19	21	51	19	70	73%	27%	100%
1,388	5,403	6,791	1,388	5,415	6,803	20	80	100
3,334	12,702	16,036	3,334	12,704	16,038	21	79	100
4,300	15,152	19,452	4,301	15,159	19,460	22	78	100
5,720	18,796	24,516	5,729	18,819	24,548	23	77	100
6,386	21,694	28,080	6,398	21,772	28,170	23	77	100
5,909	18,965	24,874	5,945	19,081	25,026	24	76	100
5,358	17,494	22,852	5,438	17,685	23,123	24	76	100
3,220	10,588	13,808	4,348	13,978	18,326	24	76	100
1,232	4,495	5,727	4,297	15,632	19,929	22	78	100
693	1,517	2,210	5,622	20,147	25,769	22	78	100
375	534	909	8,586	25,317	33,903	25	75	100
116	125	241	8,326	17,411	25,737	32	68	100
25	18	43	4,599	9,751	14,350	32	68	100
3	1	4	2,662	5,630	8,292	32	68	100
1	1	2	1,430	4,058	5,488	26	74	100
38,062	**127,504**	**165,566**	**72,454**	**222,578**	**295,032**	**25**	**75**	**100**

Benefit Recipients by Type as of June 30, 2022

		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	6,561	5,690	3	1	-	867	1,260	1,505	2,924	-	-	1	5,690
$500 - $999	6,848	5,370	23	2	-	1,453	918	1,090	3,330	5	19	8	5,370
$1,000 - $1,499	6,202	4,812	45	2	-	1,343	881	1,235	2,595	32	53	16	4,812
$1,500 - $1,999	6,323	4,759	214	26	-	1,324	1,077	1,263	2,158	102	138	21	4,759
$2,000 - $2,499	6,693	4,964	185	37	1	1,506	1,485	1,170	1,766	322	205	16	4,964
$2,500 - $2,999	7,042	5,309	112	38	1	1,582	1,903	1,040	1,396	625	325	20	5,309
$3,000 - $3,499	7,065	5,547	57	22	1	1,438	2,358	776	1,150	814	429	20	5,547
$3,500 - $3,999	6,908	5,852	40	18	-	998	2,711	607	942	1,042	523	27	5,852
$4,000 - $4,499	6,981	6,186	19	13	1	762	3,127	414	772	1,244	602	27	6,186
$4,500 - $4,999	7,585	6,993	15	3	-	574	3,658	457	662	1,508	650	58	6,993
$5,000 - $5,499	7,549	7,182	14	1	-	352	3,788	465	540	1,711	606	72	7,182
$5,500 - $5,999	7,466	7,219	11	-	-	236	3,834	499	455	1,765	590	76	7,219
$6,000 - $6,499	7,254	7,125	7	-	-	122	3,706	522	396	1,826	584	91	7,125
$6,500 - $6,999	6,656	6,565	12	-	1	78	3,416	468	294	1,848	449	90	6,565
$7,000 - $7,499	5,815	5,774	3	-	-	38	2,969	515	239	1,644	326	81	5,774
$7,500 - $7,999	4,725	4,690	5	-	-	30	2,469	459	180	1,211	297	74	4,690
$8,000- $8,499	4,047	4,027	2	-	-	18	2,054	438	126	1,085	253	71	4,027
$8,500 - $8,999	3,603	3,593	1	-	-	9	1,882	366	120	937	235	53	3,593
$9,000 - $9,499	2,917	2,914	-	-	-	3	1,442	309	101	811	197	54	2,914
$9,500 - $9,999	2,540	2,533	1	-	-	6	1,258	285	46	772	131	41	2,533
$10,000 or more	8,686	8,674	2	-	-	10	4,017	1,154	258	2,688	363	194	8,674
Total benefit recipients:	129,466	115,778	771	163	5	12,749	50,213	15,037	20,450	21,992	6,975	1,111	115,778

Summary Statistics, all Benefit Recipients, as of June 30, 2022

	Age Retirement	Disability Benefits (3 types)	Survivor Benefits
Average Monthly Benefit	$ 5,273	$2,669	$2,577
Average Age	73	61	79
Average Service Credit	27	16	-
Average Years Receiving Benefits	14	12	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
43%	13%	18%	19%	6%	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 FY Retirees	Avg. Age all FY Retirees	Avg. Service all FY Retirees
Period July 1, 2021 through June 30, 2022	**Average monthly benefit**	**$267**	**$886**	**$1,587**	**$2,622**	**$3,606**	**$4,799**	**$6,158**	**$7,149**	**$9,967**	**$4,433**	**age 61**	**25 years**
	Average final average salary	$56,321	$44,191	$57,073	$77,623	$89,926	$98,485	$106,793	$113,712	$128,801	$91,094		
	Number of retired members	228	236	252	377	551	541	665	782	31	3,663		
Period July 1, 2020 through June 30, 2021	**Average monthly benefit**	**$215**	**$883**	**$1,572**	**$2,509**	**$3,503**	**$4,684**	**$6,186**	**$7,032**	**$9,001**	**$4,520**	**age 60**	**25 years**
	Average final average salary	$47,792	$42,699	$57,856	$75,814	$87,364	$96,406	$106,899	$111,860	$112,396	$90,729		
	Number of retired members	142	182	249	371	515	490	623	779	45	3,396		
Period July 1, 2019 through June 30, 2020	**Average monthly benefit**	**$299**	**$798**	**$1,438**	**$2,422**	**$3,423**	**$4,510**	**$5,775**	**$6,645**	**$7,722**	**$4,107**	**age 61**	**25 years**
	Average final average salary	$60,000	$37,357	$53,528	$72,714	$85,210	$92,968	$99,237	$105,866	$103,561	$84,533		
	Number of retired members	132	290	254	332	564	504	576	690	47	3,389		
Period July 1, 2018 through June 30, 2019	**Average monthly benefit**	**$222**	**$806**	**$1,480**	**$2,528**	**$3,484**	**$4,708**	**$5,976**	**$6,941**	**$8,106**	**$4,366**	**age 61**	**25 years**
	Average final average salary	$50,646	$40,502	$54,277	$76,259	$86,859	$95,751	$103,192	$110,647	$114,482	$88,551		
	Number of retired members	131	210	289	417	524	493	599	768	65	3,496		
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		

Medians for Retirees as of June 30, 2022

	Median Age	Median Monthly Benefit	Median Service Credit	Retiree Count
All retirees	73	$5,167	30	115,778
New retirees	61	$4,225	27	3,663

Principal Participating Employers

Participating Employer	City	Year ended June 30, 2022 Rank	Covered Employees (including subs)	Percentage of Total TRS Membership	Year ended June 30, 2013 Rank	Covered Employees	Percentage of Total TRS Membership
School District U46	Elgin	1	3,269	2.0%	1	2,766	1.7%
Indian Prairie CUSD 204	Naperville	2	2,530	1.5	2	2,514	1.6
Plainfield SD 202	Plainfield	3	2,413	1.5	3	2,330	1.4
Rockford School District 205	Rockford	4	2,214	1.3	4	2,261	1.4
Community USD 300	Algonquin	5	1,949	1.2	7	1,606	1.0
Naperville CUSD 203	Naperville	6	1,870	1.1	5	1,753	1.1
Oswego CUSD 308	Oswego	7	1,808	1.1	-	-	-
Schaumburg CCSD 54	Schaumburg	8	1,781	1.1	10	1,468	0.9
Valley View CUSD 365	Romeoville	9	1,780	1.1	6	1,619	1.0
St. Charles CUSD 303	St. Charles	10	1,378	0.8	-	-	-
Springfield SD 186	Springfield	-	-	-	8	1,558	1.0
Waukegan CUSD 60	Waukegan	-	-	-	9	1,477	0.9
Total, largest 10 employers			**20,992**	**12.7%**		**19,352**	**12.0%**
All Other (992 employers in 2022*; 1,009 employers in 2013)			144,574	87.3%		141,340	88.0%
Grand total			**165,566**	**100.0%**		**160,692**	**100.0%**

*Other Employers by Type as of June 30, 2022	Number of Other Employers	Other Covered Employees
Local school districts	841	137,742
Special districts	132	6,022
State agencies	9	810
Total, all employers other than largest 10	**982**	**144,574**

Total Employers by Type as of June 30, 2022	Total Number of Employers	Total Covered Employees
Local school districts	851	158,734
Special districts	132	6,022
State agencies	9	810
Total, all employers	**992**	**165,566**