Teachers' Retirement System of the State of Illinois (A Component Unit of the State of Illinois) Independent Auditor's Reports and Financial Audit

Independent Auditor's Reports and Financial Audi For the Year Ended June 30, 2021 Performed as Special Assistant Auditors for the Auditor General, State of Illinois

Financial Audit For the Year Ended June 30, 2021

Table of Contents

System Officials	1
Financial Statement Report	
Summary	2
Independent Auditor's Report	3
Management's Discussion and Analysis (Unaudited)	6
Basic Financial Statements	
Statement of Fiduciary Net Position	11
Statement of Changes in Fiduciary Net Position	12
Notes to Financial Statements	13
Required Supplementary Information (Unaudited)	
Schedule of Changes in the Net Pension Liability	38
Schedule of the Net Pension Liability	38
Schedule of Investment Returns	40
Schedule of Contributions from Employers and Other Contributing Entities	40
Notes to Required Supplementary Information	41
Other Supplementary Information	
Schedule of Administrative Expenses	42
Schedule of Investment Expenses	43
Schedule of Professional Services	44
Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards	45

Financial Audit
For the Year Ended June 30, 2021

Continued

Other Reports Issued Under a Separate Cover

The Teachers' Retirement System's *Compliance Examination* for the year ended June 30, 2021, will be issued under a separate cover. Additionally, the Teachers' Retirement System will issue the Independent Auditor's Report on Pension Allocation Amounts under separate cover. The purpose of that report is to provide the audited information necessary to System employers and the State of Illinois to report their proportionate share of the collective pension amounts in their financial statements as required by GASB Statement No. 68.

Financial Audit For the Year Ended June 30, 2021

System Officials

 $\begin{array}{ll} \text{Executive Director } (6/26/21 - \text{Present}) & \text{Stan Rupnik, CFA} \\ \text{Acting Executive Director } (8/4/20 - 6/25/21) & \text{Stan Rupnik, CFA} \\ \text{Executive Director } (7/1/20 - 8/3/20) & \text{Richard W. Ingram} \\ \end{array}$

Chief Investment Officer Stan Rupnik, CFA

Chief Financial Officer (7/3/20 – Present) Deron Bertolo

Chief Financial Officer (7/1/20 – 7/2/20)

Jana Bergschneider, CPA

Chief Legal Counsel (9/12/20 – Present) Vacant

Chief Legal Counsel (7/1/20 – 9/11/20) Marcy Dutton, JD

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

Governing Board Members

President (8/10/21 - Present) Mr. Matthew Hunt President (7/1/20 - 8/6/21) Mr. Devon Bruce

Vice President (7/15/21 – Present) Mr. Andrew Hirshman Vice President (7/1/20 – 7/14/21) Mr. Mark Bailey

Board of Trustee Dr. Carmen I. Ayala Board of Trustee Ms. Norma Bellcoff Board of Trustee Ms. Marsha Byas Board of Trustee Ms. Maureen Mena Board of Trustee Mr. David Miller Board of Trustee Mr. Fred Peronto Board of Trustee Mr. Larry Pfeiffer Mr. Doug Strand Board of Trustee **Board of Trustee** Mr. Matthew Hunt

Board of Trustee Mr. Matthew Hunt
Board of Trustee Mr. Andrew Hirshman
Board of Trustee (7/15/20 – Present) Ms. Beth Anderson
Board of Trustee (7/27/20 – 7/19/21) Mr. Matthew Shattock
Board of Trustee (3/26/21 – Present) Ms. Maria Jazo-Harris
Board of Trustee (7/15/21 – Present) Mr. Joseph Blomquist
Board of Trustee (9/14/21 – Present) Mr. Kevin Blackburn

Office Locations

Springfield Office 2815 West Washington Street Springfield, Illinois 62794

<u>Lisle Office</u> 4200 Commerce Court, Suite 100 Lisle, Illinois 60532-3611

Financial Statement Report Summary For the Year Ended June 30, 2021

Summary

The audit of the accompanying financial statements of the Teachers' Retirement System of the State of Illinois ("System") was performed by **BKD**, **LLP**.

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

Exit Conference

The System waived an exit conference in a correspondence from Deron Bertolo, Chief Financial Officer, on November 30, 2021.



Independent Auditor's Report

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

Report on the Financial Statements

As Special Assistant Auditors for the Auditor General, we have audited the accompanying Statement of 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, 2021, and the Statement of Changes in Fiduciary Net Position for the year then ended, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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



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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the System as of June 30, 2021, and the changes in its fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

The actuarially determined 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.

Other Matters

Required Supplementary Information

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

Other Information

Our audit for the year ended June 30, 2021 was conducted for the purpose of forming an opinion on the System's basic financial statements.

The other supplementary information, 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 information, as listed in the table of contents, has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance

with auditing standards generally accepted in the United States of America. In our opinion, the other supplementary information as listed in the table of contents is fairly stated, in all material respects, in relation to the basic financial statements as a whole for the year ended June 30, 2021.

We have also previously audited, in accordance with auditing standards generally accepted in the United State of America, the System's basic financial statements as of and for the year ended June 30, 2020 (not presented herein), and have issued our report thereon dated December 10, 2020, which contained an unmodified opinion on those financial statements. The other supplementary information, as listed in the table of contents, for the year ended June 30, 2020 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the June 30, 2020 financial statements. The other supplementary information, as listed in the table of contents, has been subjected to the auditing procedures applied in the audit of the June 30, 2020 basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare those 2020 basic financial statements or to those 2020 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 2020 other supplementary information, as listed in the table of contents, is fairly stated in all material respects in relation to the basic financial statements as a whole for the year ended June 30, 2020.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 13, 2021 on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

SIGNED ORIGINAL ON FILE

Decatur, Illinois December 13, 2021

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, 2021. Please read it in conjunction the Financial Statements and related notes that follow this discussion.

FINANCIAL HIGHLIGHTS

- The net position of TRS at June 30, 2021 was \$64.2 billion.
- During FY21, the net position of TRS increased \$11.9 billion.
- Contributions from members, employers and the State of Illinois were \$6.3 billion, an increase of \$361.3 million or 6.1 percent for FY21.
- Total net investment income was \$13.0 billion, compared to \$275.7 million in FY20, an increase of \$12.8 billion.
- Benefits and refunds paid to members and annuitants were \$7.4 billion, an increase of \$288.6 million or 4.1 percent.
- The actuarial accrued liability was \$138.9 billion at June 30, 2021.
- The unfunded actuarial accrued liability was \$79.9 billion at June 30, 2021. The funded ratio was 42.5 percent at June 30, 2021. 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 \$142.2 billion at June 30, 2021.
- The net pension liability (NPL) was \$78.0 billion at June 30, 2021. The plan fiduciary net position, as a percentage of total pension liability, was 45.1 percent.

The Financial Statements consist of:

Statement of Fiduciary Net Position. This statement reports the pension trust fund's net position which represents the difference between the financial statement elements comprised of assets and liabilities. It is the balance sheet for the pension system and reflects the financial position of the Teachers' Retirement System as of June 30, 2021.

Statement of Changes in Fiduciary Net Position.

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

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

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

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

CONDENSED COMPARATIVE STATEMENTS OF FIDUCIARY NET POSITION AS OF JUNE 30

	2021	Percentage Change	2020
Cash	\$16,263,026	(33.2%)	\$24,329,683
Receivables and prepaid expenses	4,468,795,311	(0.6)	4,496,792,625
Investments	63,851,832,280	24.1	51,454,158,912
Invested securities lending collateral	2,425,695,348	19.9	2,023,876,139
Capital assets	8,453,925	37.9	6,130,809
Total assets	70,771,039,890	22.0	58,005,288,168
Total liabilities	6,558,534,870	15.3	5,688,810,397
Net position restricted for pensions	\$64,212,505,020	22.7%	\$52,316,477,771

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

		Percentage	
	2021	Change	2020
Contributions	\$6,261,774,388	6.1%	\$5,900,510,333
Net investment income	13,046,153,685	4,632.5	275,669,398
Total additions	19,307,928,073	212.6	6,176,179,731
Benefits and refunds	7,388,142,712	4.1	7,099,524,955
Administrative expenses	23,758,112	3.4	22,966,372
Total deductions	7,411,900,824	4.1	7,122,491,327
Net increase/decrease in net position	11,896,027,249	1,357.1	(946,311,596)
Net position restricted for pensions - beginning of year	52,316,477,771	(1.8)	53,262,789,367
Net position restricted for pensions - end of year	\$64,212,505,020	22.7%	\$52,316,477,771

FINANCIAL ANALYSIS

TRS was created to provide retirement, survivor and disability benefits to qualified members. Increases or decreases in the plan's net position serve as useful indicators of TRS's financial position. The net position available to pay benefits was \$64.2 billion at June 30, 2021.

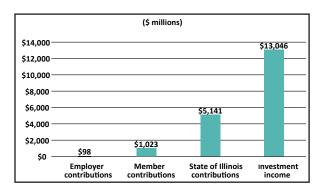
CONTRIBUTIONS

Contributions increased \$361.3 million during FY21. Contributions from the State of Illinois increased \$327.2 million, member contributions increased \$29.1 million and employer contributions from school districts increased \$5.0 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, 2021



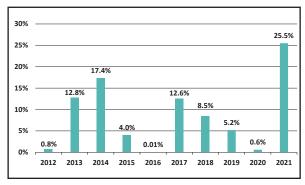
INVESTMENTS

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

The TRS investment portfolio returned 25.5 percent, net of fees, for the fiscal year ended June 30, 2021.

During the fiscal year, total TRS investment assets and net investment income increased approximately \$12.4 and \$12.8 billion, respectively. The significant improvement was due to the year over year increase in the annual rate of return.

Annual Rate of Return (net of investment expenses)

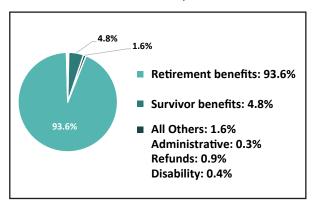


BENEFITS AND REFUNDS

Retirement, survivor and disability benefit payments increased \$288.6 million during FY21. Benefit payments increased to \$7.3 billion with 127,518 recipients in FY21. 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 112,977 as of June 30, 2020 to 114,252 as of June 30, 2021.

Refunds of contributions decreased \$23 thousand in FY21. The decrease during FY21 is the result of lower member and retirement refunds.

Deductions by Type for the Year Ended June 30, 2021



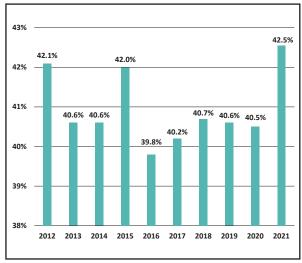
ACTUARIAL

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 \$3.3 billion in FY21 to \$138.9 billion at June 30, 2021. 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 decreased \$773 million during FY21 to \$79.9 billion at June 30, 2021. The funded ratio reflects the percentage of the actuarial accrued liability covered by the actuarial value of assets. The funded ratio increased from 40.5 percent on June 30, 2020 to 42.5 percent on June 30, 2021.

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 \$142.2 billion at June 30, 2021, while the NPL is \$78.0 billion at June 30, 2021.

LEGISLATIVE

SOLVING RETIREMENT CONCERNS CREATED BY COVID-19

Public Act 102-0016 will help correct the unforeseen effects of the COVID-19 cancellation of in-person learning and extracurricular activities on TRS members who will be retiring in the next few years.

Many teachers and administrators did not earn stipends and other extra pay that they would have in a year without the coronavirus. As a result, most member creditable earnings reported to TRS for the 2020-21 school year are expected to be lower than in previous years and future years.

Under the previous law, if teachers who taught during 2020-21 were planning to retire within the next four years, they were required to use their four highest, consecutive salaries to calculate their initial pension. That calculation would have included the reduced salary for 2020-21 during the next four years because of the "consecutive" requirement. As a result, an initial pension would be lower than it would have been if COVID had never happened.

To correct this, the law removes the requirement that the final average salary calculation use the four "consecutive" highest salaries.

Additionally, the law also creates new exemptions to an existing statute that requires school districts to pay a higher contribution to TRS if they grant a raise to a TRS member on the verge of retirement that is greater than 6 percent from one year to the next. The new exemptions are for "overload, stipend work, increased instructional time and summer school" time.

It is probable that adding overload, stipend, summer school and increased instructional time to a teacher's base salary in the year following COVID-19 cancellations would boost that member's total compensation by more than 6 percent. Under normal circumstances that would trigger the 6 percent threshold and require added TRS contributions from the school district.

ADDRESSING THE CLASSROOM TEACHER SHORTAGE IN ILLINOIS

Two new laws enacted during FY21 make it easier for retired educators to help school districts overcome the chronic shortage of classroom teachers in Illinois.

Public Act 102-0537 extends the "sunset" date of the enhanced post-retirement work limits from 2021 to 2023. A retired TRS member will not lose her/his pension benefit if she/he teaches for up to 120 days or 600 hours during a single school year. The limits were first raised in 2011 from 100 days or 500 hours.

A second measure, Public Act 102-0440, extends the life of the state's "subject shortage area" statute from 2021 to 2024. With the approval of a regional school superintendent, a school district can declare that it has a shortage of qualified teachers in a particular subject area and can hire retired teachers to fill those vacancies. Those retired teachers hired do not lose their pension benefits.

ALLOWING TRS MEMBERS TO CLAIM PRIVATE SCHOOL SERVICE CREDIT

Public Act 102-0525 provides TRS members with a limited opportunity to purchase optional service credit for up to two years of work in a private school recognized by the Illinois State Board of Education.

"AUTO ENROLLMENT" OF NEW TRS MEMBERS IN TRS SUPPLEMENTAL SAVINGS PLAN

TRS continues to develop a defined contribution benefit for active members. The new program is called the "TRS Supplemental Savings Program" (SSP).

Public Act 102-0540 enacted in FY21 requires that "as soon as practicable" TRS "shall automatically enroll" all newly hired TRS members into the SSP. All existing active members will not be automatically enrolled when the SSP is launched.

While new members are automatically enrolled, they can "opt out" of the SSP within 90 days from her/his first day of employment.

FINANCIAL STATEMENTS

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF ILLINOIS STATEMENT OF FIDUCIARY NET POSITION JUNE 30, 2021

50HL 50, 2021	June 30, 2021
Assets	
Cash	\$16,263,026
Receivables and prepaid expenses:	
Member contributions	99,098,234
Employer contributions	9,821,474
State of Illinois	5,024,118
Investment income	121,604,718
Other receivables	285,804
Pending investment sales	4,229,353,118
Prepaid expenses	3,607,845
Total receivables and prepaid expenses	4,468,795,311
Investments, at fair value:	
Fixed income	10,220,741,948
Public equities	22,407,527,477
Alternative investments	29,359,397,945
Derivatives	(5,405,619)
Short-term investments	1,756,658,884
Foreign currency	112,911,645
Total investments	63,851,832,280
Invested securities lending collateral:	
Securities lending collateral	2,366,899,348
Securities lending collateral with the State Treasurer	58,796,000
Total invested securities lending collateral	2,425,695,348
Capital assets, net of accumulated depreciation	8,453,925
Total assets	70,771,039,890
Liabilities	
Benefits and refunds payable	6,021,934
Administrative expenses payable	2,789,817
Investment expenses payable	30,395,315
Pending investment purchases	4,093,633,008
Securities lending collateral	2,425,694,796
Total liabilities	6,558,534,870
Net position restricted for pensions	\$64,212,505,020

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, 2021

TOR THE TEAR ENDED SONE 30, 2021	
	June 30, 2021
Additions	
Contributions:	
Members	\$1,023,531,951
State of Illinois	5,140,648,356
Employers	
Federal funds	27,978,206
2.2 benefit formula	61,558,261
Excess employer costs	8,057,614
Total contributions	6,261,774,388
Investment income:	
Net increase in fair value of investments	12,183,214,170
Alternatives income	942,481,173
Interest and dividends	812,920,640
Other investment income	6,201,472
Securities lending income	8,937,961
Less investment expenses:	
Alternatives expense	(420,642,148)
Direct investment expense	(486,423,308)
Securities lending management fees	(536,275)
Net investment increase	13,046,153,685
Total additions	19,307,928,073
B. J. W.	
Deductions	0.025.054.204
Retirement benefits	6,935,054,294
Survivor benefits	357,078,075
Disability benefits	31,816,332
Refunds	64,194,011
Administrative expenses	23,758,112
Total deductions	7,411,900,824
Net increase in net position	11,896,027,249
Not nocition rectricted for nancions	
Net position restricted for pensions Beginning of year	_ 52,316,477,771
End of year	\$64,212,505,020

See accompanying Notes to Financial Statements.

NOTES TO FINANCIAL STATEMENTS

A. PLAN DESCRIPTION

1. REPORTING ENTITY

The Teachers' Retirement System of the State of Illinois (TRS) is 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.

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

2. EMPLOYERS

Members of TRS are employed by school districts, special districts, certain state agencies and certain non-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.

Number of Employers (as of June 30)

	2021
Local school districts	851
Special districts	130
State agencies	_10
Total	991

3. MEMBERS TRS Membership (as of June 30)

	2021
Retirees and beneficiaries	127,518
Inactive members	145,769
Active members	159,027
Total	432,314

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

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 years of creditable earnings within the last 10 years of creditable service and the percentage of average salary to which the member is entitled. Most members retire under a formula that provides 2.2 percent of final average salary up to a maximum of 75 percent

with 34 years of service. The 2.2 percent formula became effective July 1, 1998 but service earned before that date can be upgraded to the 2.2 formula with a member contribution. The cost of the upgrade can be reduced if members upgrade and continue teaching after 1998. A graduated formula applies to service earned before 1998 and provides a maximum benefit of 75 percent of average salary with 38 years of service.

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

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

Disability and death benefits are provided.

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

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

TIER 2 BENEFITS

Differences with Tier 1 include raising the minimum eligibility to draw a retirement benefit to age 67 with 10 years of service. A discounted annuity can be paid at age 62 with 10 years of service. The Tier 2 law caps creditable earnings and contributions used for retirement purposes at a level that is lower than the Social Security wage base. Tier 2 annual increases will be the lesser of 3 percent or ½ percent of the rate of inflation of the original benefit beginning Jan. 1 following attainment of age 67 or on Jan. 1 following the member's first anniversary in retirement, whichever is later.

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

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

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

TIER 3 BENEFITS

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.

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, 2021 actuarial valuation were used to calculate the June 30, 2021 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, 2021, the assumption for future investment returns was 7.0 percent, a rate unchanged from June 30, 2020. The investment return assumption for the 2021 actuarial valuation is based on an asset allocation study conducted by the TRS investment consultant and additional analysis conducted by the actuary in 2021.

The TRS actuary used the following assumed rates of returns by asset class, excluding 2.25 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	6.2%	16.7%
U.S. equities small/mid cap	7.4	2.2
International equities developed	6.9	10.6
Emerging market equities	9.2	4.5
U.S. bonds core	1.6	3.0
International debt developed	0.4	1.0
International debt emerging	4.4	4.0
Cash equivalents	0.1	2.0
TIPS	0.8	1.0
Real estate	5.8	16.0
Hedge funds (absolute return)	3.9	10.0
Infrastructure	6.3	4.0
Private equity	10.4	15.0
Private debt	6.5	10.0

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, 2021, 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 and 101-0010. 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 \$5.7 billion in FY22 and grow to \$9.2 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, 2021 measurement date based on census data as of June 30, 2020. Assets, included in plan fiduciary net position, are measured at fair value.

Net Pension Liability

	June 30, 2021
Total pension liability	\$142,223,798,748
Plan fiduciary net position	64,212,505,020
Net pension liability	\$78,011,293,728
Plan fiduciary net position as a percentage of the total pension liability	45.1%

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	\$96,615,373,673	\$78,011,293,728	\$62,558,129,092

Most of the actuarial assumptions used in the June 30, 2021 actuarial valuation are based on the actuarial experience analysis dated September 2021 that covered the period July 1, 2017 through June 30, 2020.

Actuarial Assumptions Used for Financial Reporting Disclosure

Actuarial Valuation Date	June 30, 2021
	•
Census Date:	June 30, 2020 with total pension liability projected to June 30, 2021
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, 2021
Real rate of investment return	4.75%
Projected salary increases	8.50% with 1 year of service to 3.50% with 20 or more years of service. Includes inflation and real wage growth (productivity) assumptions.
Group size growth rate	0%
Assumed inflation rate	2.25%
Post-retirement increase	Tier 1: 3%, compounded; Tier 2: 1.125%, 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

GASB Statement No. 98, "The Annual Comprehensive Financial Report" establishes the term *annual comprehensive financial report* and its acronym *ACFR*. The new term and acronym replace instances of comprehensive annual financial report and its acronym in generally accepted accounting principles for state and local governments. The requirements of this Statement are effective for fiscal years ending after December 15, 2021, however TRS has early applied its provisions for the year ended June 30, 2021.

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 will be implementing the provisions of GASB 87 for the year ended June 30, 2022.

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, 2021 was as follows:

	Beginning	Additions/ Transfers	Disposals/ Transfers	Ending
	Balance	In	Out	Balance
Capital Assets, not de	preciated:			
Land	\$235,534	\$ -	\$ -	\$235,534
Mineral Lease Rights	2,643	-	-	2,643
	238,177			238,177
Capital Assets, depre	ciated:			
Office building	9,081,955	225,110	-	9,307,065
Site improvements	1,127,708	-	-	1,127,708
Equipment and furniture	3,044,079	220,476	26,912	3,237,643
Purchased Software	310,045	-	15,000	295,045
Internally Generated Software (IGS)	6,436,174	3,671,652	-	10,107,826
	19,999,961	4,117,238	41,912	24,075,287
Less accumulated d	lepreciation:			
Office building	7,755,158	213,099	-	7,968,257
Site improvements	960,683	70,989	-	1,031,672
Equipment and furniture	2,717,035	222,341	26,912	2,912,464
Purchased Software	310,045	-	15,000	295,045
Internally Generated	2 264 400	1 207 602		2 652 101
Software (IGS)	2,364,408	1,287,693		3,652,101
Total Net	14,107,329	1,794,122	41,912	15,859,539
Capital Assets	\$6,130,809	\$2,323,116	\$ -	\$8,453,925
Office building and site improvements (\$25,000 or greater capitalized) 10			10 - 40 years	
Equipment and furnitu (\$5,000 or greater care				3 - 10 years
Software (\$25,000 or g	•	lized)		3 - 5 years
301tware (923,000 01 g	, cater capital	iizcu)		J-J 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, 2021, the System had a liability of \$2,272,713 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, 2021 was as follows:

	Beginning Balance Additions	Reductions	Ending Balance			
Compensated absences payable	\$2,202,238 \$902,736	\$832,261	\$2,272,713			
The estimated amount due within one year is: \$105,007						

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 \$16,263,026 at June 30, 2021. Of the bank balance, \$16,262,901 was on deposit with the State Treasurer at June 30, 2021. 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 \$1,589,607,057 at June 30, 2021. The STIF fund has an average credit quality rating of A1P1 and a weighted average maturity of 48.0 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 \$112,911,645 at June 30, 2021.

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, 2021.

Long-term Asset Allocation Policy Mix				
Equity	49%			
Real assets	20			
Diversifying strategies	10			
Income	21			
Total	100%			

2. INVESTMENT RISK CUSTODIAL CREDIT RISK

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

CONCENTRATION OF CREDIT RISK

Concentration of credit risk is the risk of loss that may be attributed to the magnitude of an investment in any one issuer. Investment parameters established in the Investment Management Agreements with external managers restrict holdings to no more than 5 percent of a single issuer within an account. The TRS portfolio has no investments in any one issuer that comprise 5 percent or more of the System's total investments or fiduciary net position.

CREDIT RISK

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

As of June 30, 2021, 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	Tota
Aaa	\$171,220,232	\$27,449,434	\$51,730,848	\$110,914,168	\$681,894,069	\$ -	\$568,273,550	\$1,611,482,30
Aa1	-	3,928,449	-	-	-	-	429,218,555	433,147,00
Aa2	22,234,864	3,077,493	78,060,490	-	-	-	-	103,372,84
Aa3	11,116,072	8,248,078	52,549,449	-	-	2,655,158	11,081,702	85,650,45
A1	102,572,259	500,454	249,558,267	-	-	-	-	352,630,98
A2	316,193,661	13,247,907	56,133,201	-	-	-	1,200,995,152	1,586,569,92
А3	245,695,260	-	147,879,684	-	_	-	606,932,542	1,000,507,48
Baa1	145,560,423	2,920,566	267,515,553	-	-	-	-	415,996,54
Baa2	270,555,209	10,217,211	433,269,041	-	-	-	-	714,041,46
Baa3	531,456,522	986,451	373,401,004	-	-	-	26,484,998	932,328,97
Ba1	82,586,143	-	123,462,227	-	-	2,564,842	-	208,613,212
Ba2	163,426,054	-	419,400,849	-	-	-	-	582,826,903
Ba3	126,279,138	-	274,095,502	-	-	-	73,020,857	473,395,49
B1	55,583,738	16,007	98,552,502	-	-	-	4,610,856	158,763,103
B2	45,857,207	-	333,814,599	-	-	-	-	379,671,800
В3	18,165,768	-	187,152,735	-	-	-	-	205,318,503
Caa1	5,000,109	-	111,086,791	-	-	-	-	116,086,900
Caa2	-	121,568	28,140,667	-	-	-	-	28,262,23
Caa3	2,849,082	-	6,307,782	-	-	-	-	9,156,864
Ca	348,313	1,519,634	53,960,969	-	-	-	-	55,828,91
C	-	66,111	7,247,961	-	-	-	-	7,314,072
Not rated	17,077,610	8,690,762	73,646,938	-	-	-	-	99,415,310
Withdrawn	5,324,127	63,191	4,969,766	-				10,357,08
Total credit risk, bonds, corporate notes and government obligations	2,339,101,791	81,053,316	3,431,936,825	110,914,168	681,894,069	5,220,000	2,920,618,212	9,570,738,38
U.S. Treasuries							_	650,003,56
Total bonds, corporate notes & government obligations		\$81,053,31 <u>6</u>	\$3,431,936,825	\$110,914,168	\$681,894,069	\$5,220,000	\$2,920,618,212 -	\$10,220,741,94

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, 2021 is as follows:

				Maturity in Years		
Туре	2021 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	\$760,917,735	\$145,922,371	\$341,116,443	\$223,621,874	\$28,185,455	\$22,071,592
U.S. government-backed mortgages	681,894,069	210	1,712,645	472,354	645,436,327	34,272,533
Municipals	5,220,000	157,907	-	977,258	1,429,677	2,655,158
Asset-backed securities	81,053,316	1,328,184	30,988,782	17,413,927	22,854,793	8,467,630
Commingled funds (U.S. & international)*	2,920,618,212	59,622,651	318,366,038	2,297,702,875	244,926,648	-
Corporate debt securities	2,339,101,791	138,351,886	1,108,967,545	714,795,147	107,476,767	269,510,446
Foreign debt/corporate obligations	3,431,936,825	266,556,404	1,021,958,952	1,195,472,106	544,364,568	403,584,795
Total bonds, corporate notes and government obligations	10,220,741,948	611,939,613	2,823,110,405	4,450,455,541	1,594,674,235	740,562,154
Derivatives	(5,405,619)	3,209,963	(6,058,041)	(2,064,482)	(493,059)	
Total bonds, corporate notes, government obligations, securities lending collateral and derivatives	\$10,215,336,329	\$615,149,576	\$2,817,052,364	\$4,448,391,059	\$1,594,181,176	<u>\$740,562,154</u>

^{*} 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.

Currency Fo	reign Currency	Equities	Fixed Income	Derivatives	Total
Argentine Peso	\$14,846	\$ -	\$53,274,083	\$ -	\$53,288,929
Australian Dollar	2,182,941	422,032,611	-	300,869	424,516,421
Bangladeshi Taka	-	-	-	-	-
Brazilian Real	1,635,098	173,571,913	102,117,226	(13,395)	277,310,842
British Pound	11,231,025	840,080,573	2,319,547	-	853,631,145
Canadian Dollar	7,609,001	578,066,370	-	(77)	585,675,294
Chilean Peso	2,127,127	13,924,644	16,064,828	(57,325)	32,059,274
Chinese Yuan	24,811,234	-	-	-	24,811,234
Chinese Yuan Renminbi	(21,148,767)	217,429,262	39,836,532	(891,319)	235,225,708
Colombia Peso	405,879	893,233	78,605,496	(137,232)	79,767,376
Czech Koruna	194,036	6,496,027	9,810,523	(163,826)	16,336,760
Danish Krone	3,145,291	203,966,267	-	-	207,111,558
Dominican Peso	-	-	315,679	-	315,679
Egyptian Pound	4,099,608	13,441,430	47,209,527	_	64,750,565
Emirati Dirham	127,271	2,902,346	-	_	3,029,617
Euro	19,733,177	1,856,761,393	62,985,612	_	1,939,480,182
Ghana Cedi	575,292	-	24,416,688	-	24,991,980
Hong Kong Dollar	4,197,552	842,638,450	-	225,193	847,061,195
Hungarian Forint	199,708	28,979,856	16,029,763	(85,851)	45,123,476
Indian Rupee	3,845,209	353,197,247	66,742,445	-	423,784,901
Indonesian Rupiah	3,653,145	50,118,233	128,760,334	-	182,531,712
Israeli Shekel	226,415	20,659,910	-	651	20,886,976
Icelandic Krona	,	,,	-	-	-
Japanese Yen	19,253,322	1,641,343,964	99,991,865	_	1,760,589,151
Kazakhstani Tenge	,,	-,- :-,- :-,- :	1,015,953	-	1,015,953
Malaysian Ringgit	874,538	30,122,445	45,313,284	(58,081)	76,252,186
Mexican Peso	6,078,740	79,675,342	136,818,843	(4,079,752)	218,493,173
Moroccan Dirham	-		-	(1,010,102)	-
New Taiwan Dollar	4,982,104	641,575,668	_	1,133,480	647,691,252
New Zealand Dollar	1,613,084	12,728,174	_	-	14,341,258
Nigerian Naira	1,508,866	,,	_	_	1,508,866
Norwegian Krone	749,817	57,886,434	_	_	58,636,251
Pakistani Rupee	3,801	786,461	_	_	790,262
Peruvian Sol	1,056,910	254,918	28,815,927	_	30,127,755
Philippine Peso	275,982	9,163,123	,,	-	9,439,105
Polish Zloty	479,908	64,103,410	32,318,868	216,220	97,118,406
Qatari Riyal	102,350	4,368,640	,,		4,470,990
Romanian Leu	-	-	10,549,763	-	10,549,763
Russian Ruble	1,187,174	117,191,373	80,729,899	(317,248)	198,791,198
Serbian Dinar	-	-	1,852,436	-	1,852,436
Singapore Dollar	904,793	68,119,138	31,912,893	73,141	101,009,965
South African Rand	(390,317)	65,970,296	102,111,612	431,015	168,122,606
South Korean Won	1,383,207	648,826,773	100,486,759	(424,374)	750,272,365
Swedish Krona	1,974,489	313,570,634	-	-	315,545,123
Swiss Franc	1,099,961	550,399,437	-	-	551,499,398
Thailand Baht	405,548	102,324,294	37,328,360	-	140,058,202
Turkish Lira	244,948	18,102,168	6,418,382	(223,172)	24,542,326
Ukraine Hryvnia	257,332	-	2,860,211	-	3,117,543
Uruguayan Peso	-	-	1,427,522	-	1,427,522
Vietnam Dong	-	3,817,796	-	-	3,817,796
Total subject to foreign currency risk	112 011 645		1 260 440 060	(4.071.003)	
Investments in international securities	112,911,645	10,055,490,253	1,368,440,860	(4,071,083)	11,532,771,675
payable in U.S. dollars	_	1,150,952,123	2,063,495,965	(465,682)	3,213,982,406
Total international investment			2,000,700,000	(703,002)	5,215,302,700
securities (including domestic					
securities payable in foreign currency)	112,911,645	11,206,442,376	3,431,936,825	(4,536,765)	14,746,754,081
Domestic investments (excluding					
securities payable in foreign currency)		11,201,085,101	6,788,805,123	(868,854)	17,989,021,370

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 \$219,879,161, \$3,233,732 and \$812,247,691 at June 30, 2021, 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, 2021, Citibank, N.A. served as the third-party securities lending agent for the fixed income, domestic equity and international equity lending programs. In this capacity, TRS reduces credit risk by allowing Citibank to lend securities to a diverse group of dealers on behalf of TRS. At fiscal-year end, TRS has no credit risk exposure to borrowers because the amount TRS owes the

borrowers exceeds the amount the borrowers owe TRS. The weighted average term of the loans is nine days as securities on loan can be recalled on demand by TRS or the borrower can return the loaned securities at any time. Since loans are terminable at will, the maturity of loans generally does not match the maturity of collateral investments. TRS may enter into term loan agreements, evaluated on an individual basis. As of June 30, 2021, 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 57 days at June 30, 2021. 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, 2021, TRS had outstanding loaned investment securities with a fair value of \$2,407,754,585 against which it had received cash and non-cash collateral with a fair value of \$2,474,785,470. The securities on loan remain on TRS's Statement of Fiduciary Net Position in their respective investment categories. As of June 30, 2021, TRS cash collateral received and reported as securities lending obligation on the Statement of Fiduciary Net Position totaled \$2,366,898,796; whereas, the fair value of re-invested cash collateral reported as securities lending collateral was \$2,366,899,348. The net increase (decrease) in fair value of investments within the Statement of Changes in Fiduciary Net Position reflects the change in fair value of the re-invested cash collateral. TRS also reports securities lending collateral with the Office of the Illinois State Treasurer on the Statement of Fiduciary Net Position. Further detail on this amount can be obtained by calling the Office of the Illinois State Treasurer at (217) 558-1250 or by visiting www.illinoistreasurer.gov.

Income earned and costs related to securities lending activities are reported on the Statement of Changes in Fiduciary Net Position. For FY21,

the System earned net income of \$8,401,686 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, 2021, 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, 2021, the TRS investment portfolio held the following derivatives.

Investment Derivatives	Fair Value at June 30, 2021	Change in Fair Value	Shares/Par	Notional
Credit default swaps buying protection	\$562,305	(\$1,214,730)	55,555,000	\$55,100,685
Credit default swaps selling protection	156,799	169,004	10,220,000	10,379,922
Index and variance swaps	3,189,078	29,455,976	21,022,641	126,196,194
Pay fixed interest rate/inflation swaps	(514,734)	1,217,327	237,828,397	237,949,324
Receive fixed interest rate/inflation swaps	(8,819,952)	(14,150,868)	570,809,535	562,624,067
Equity futures long	-	32,651,181	97,832,323	119,449,574
Equity futures short	-	(12,025,823)	(241,100)	(43,067,640)
Fixed income futures long	-	(5,268,239)	154,800,000	200,594,726
Fixed income futures short	-	8,206,594	(153,369,053)	(227,534,570)
Currency forward options purchased	653,876	(3,280,837)	173,098,591	173,193,823
Currency forward options written	(669,836)	6,270,986	(156,706,459)	156,379,569
Options on futures purchased	-	(314,361)	-	-
Swaptions purchased	59,793	444,799	39,600,000	39,600,000
Swaptions written	(22,947)	771,149	(39,600,000)	39,600,000
FX forwards	13,052,105	(24,055,051)	-	-
Rights	150,384	504,651	109,550	109,550
Warrants	14,255,061	5,327,051	1,846,399	1,846,399
Grand total	\$22,051,932	\$24,708,809		\$1,452,421,623

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, 2021, TRS had currency forward purchase or sale contracts for 33 different currencies with various settlement dates.

Fair Value: As of June 30, 2021, TRS's open currency forward contracts had a net fair value (unrealized gain) of \$13,052,105.

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, 2021, TRS had outstanding futures contracts with a notional value, or exposure, of \$49,442,090. Notional values do not represent the actual values in the Statement of Fiduciary Net Position. The contracts have various expiration dates through September 2021.

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

have no fair value. TRS's realized gain on futures contracts was \$23,323,603 during FY21.

Туре	Number of Contracts	Notional Principal
Equity Futures International equity index futures - long	2,064	\$119,449,574
International equity index futures - short	(1,966)	(43,067,640)
Fixed Income/Cash Equivale	nt Futures	
Fixed income index futures – long	1,067	200,594,726
Fixed income index futures – short	(1,190)	(172,386,102)
International fixed income index futures – short	(288)	(55,148,468)

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, 2021, the TRS investment portfolio held currency forward options with notional value of \$329,573,392. Contractual principal/notional values do not represent the actual values in the Statement of Fiduciary Net Position. The contracts have various expiration dates through April 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, 2021, the fair value of all option contracts, gross of premiums received, was (\$15,960). 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, 2021. 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.

Туре	Number of Contracts	Notional Principal
Currency Forward Options		
Currency forward call options - purchased	4 :	\$32,209,488
Currency forward call options - written	4	32,013,586
Currency forward put options - purchased	8	140,984,335
Currency forward put options - written	6 :	124,365,983

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, 2021, TRS had outstanding written put swaption exposure of \$39,600,000 and purchased put swaption exposure of \$39,600,000. The contracts have various maturity dates through

September 2021. Exposure amounts for swaptions do not represent the actual values in the Statement of Fiduciary Net Position.

Fair Value: Fluctuations in the fair value of swaptions are recognized in TRS's financial statements as incurred rather than at the time the swaptions are exercised or when they expire. As of June 30, 2021, the fair value of swaption contracts was \$36,846.

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, 2021, TRS had credit default/ index swaps in its portfolio with various maturity dates through June 2026. The notional values as of June 30, 2021, included purchased credit default swaps (buying protection) of \$55,100,685, written credit default swaps (selling protection) of \$10,379,922 and index swaps of \$126,196,194.

Fair Value: The fair value of credit default swaps, including index swaps, held by TRS was \$3,908,182 as of June 30, 2021. 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, 2021, TRS held interest rate swaps in various currencies with various expiration/maturity dates ranging from 2023 to 2051. 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, 2021.

	As of June 30, 2021
Receive floating/pay fixed	(\$514,734)
Receive fixed/pay floating	(8,819,952)

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, 2021.

Asset Description	Par	Gross Notional	TRS Receives	TRS Pays	Maturity Date	Fair Value 6/30/21
Pay Fixed Interest Rate/Inflation	on Swaps:					
Interest Rate Swap BRL	6,322,091	\$1,259,920	3 month Brazilian CDI	8.25%	1/2/2025	(\$20,447)
Interest Rate Swap BRL	20,170,845	4,019,818	3 month Brazilian CDI	8.14	1/2/2025	(52,333)
Interest Rate Swap ZAR	219,726,000	15,451,846	3 month JIBAR	4.98	8/21/2025	361,663
Interest Rate Swap COP	9,000,000,000	2,412,078	3 Month IBRCO	3.79	3/15/2026	124,664
Interest Rate Swap USD	92,820,000	92,822,844	3 month LIBOR	0.98	3/23/2026	(327,448)
Interest Rate Swap ZAR	277,162,000	19,424,547	3 month JIBAR	6.01	3/24/2026	(105,579)
Interest Rate Swap MYR	23,400,000	5,636,841	3 month KLIBOR	2.65	4/8/2026	(24,841)
Interest Rate Swap MYR	22,000,000	5,312,385	3 month KLIBOR	2.60	4/21/2026	(6,903)
Interest Rate Swap MYR	23,700,000	5,702,166	3 month KLIBOR	2.67	4/27/2026	(26,337)
Interest Rate Swap HUF	1,320,000,000	4,464,468	6 month BUBOR	2.15	5/14/2026	49,203
Interest Rate Swap MXN	8,430,000	424,151	28 day Mexican TIIE	5.80	6/10/2026	14,195
Interest Rate Swap CLP	2,602,000,000	3,573,912	6 month Chile Interbank Rate	3.17	6/23/2026	44,895
Interest Rate Swap ZAR	48,748,000	3,416,091	3 month JIBAR	5.91	6/25/2026	10,032
Interest Rate Swap BRL	7,224,767	1,439,813	3 month Brazilian CDI	7.11	1/4/2027	45,933
Interest Rate Swap BRL	74,236,357	14,794,455	3 month Brazilian CDI	7.06	1/4/2027	497,232
Interest Rate Swap BRL	9,850,703	1,963,132	3 month Brazilian CDI	8.57	1/4/2027	(32,858)
Interest Rate Swap BRL	14,695,999	2,928,744	3 month Brazilian CDI	8.38	1/4/2027	(7,827)
Interest Rate Swap BRL	8,383,132	1,670,662	3 month Brazilian CDI	7.75	1/4/2027	18,529
Interest Rate Swap ZAR	34,820,000	2,442,034	3 month JIBAR	6.83	3/17/2031	77,921
Interest Rate Swap USD	14,560,000	14,560,446	3 month LIBOR	1.73	3/23/2031	(444,390)
Interest Rate Swap ZAR	25,164,000	1,777,035	3 month JIBAR	7.54	4/9/2031	(43,994)
Interest Rate Swap CLP	609,800,000	837,945	6 month Chile Interbank Rate	3.68	5/3/2031	32,244
Interest Rate Swap USD	20,390,000	20,393,466	3 month LIBOR	1.65	5/21/2031	(450,000)
Interest Rate Swap PLN	7,610,000	1,999,064	6 month WIBOR	1.75	6/17/2031	514
Interest Rate Swap USD	9,220,000	9,221,461	3 month LIBOR	1.86	2/22/2051	(248,802)
Total Pay Fixed Interest Rate/In	flation Swaps:	\$237,949,324			=	(\$514,734)
Receive Fixed Interest Rate/Inf	lation Swaps:					
Interest Rate Swap BRL	36,318,541	\$7,027,264	4.25%	3 month Brazilian CDI	1/2/2023	(\$210,605)
Interest Rate Swap BRL	32,899,822	6,566,138	6.57	3 month Brazilian CDI	1/2/2023	9,580 (continued)

(continued)		Cons	TD:	700	M-1	Fairly 1
Asset Description	Par	Gross Notional	TRS Receives	TRS Pays	Maturity Date	Fair Value 6/30/21
Interest Rate Swap BRL	72,320,339	\$14,386,062	6.45%	3 month Brazilian CDI	1/2/2023	(\$26,553)
Interest Rate Swap MXN	2,629,166,000	129,941,112	4.80	28 day Mexican TIIE	2/27/2023	(2,108,106)
Interest Rate Swap MXN	1,019,094,000	50,740,518	5.64	28 day Mexican TIIE	3/23/2023	(443,229)
Interest Rate Swap BRL	23,620,152	4,496,188	4.59	3 month Brazilian CDI	1/2/2024	(211,038)
Interest Rate Swap USD	45,780,000	45,773,071	0.44	3 month LIBOR	3/23/2024	(61,638)
Interest Rate Swap PLN	15,800,000	4,369,870	1.80	6 month WIBOR	7/24/2024	149,721
Interest Rate Swap BRL	6,307,119	1,224,124	5.76	3 month Brazilian CDI	1/2/2025	(32,813)
Interest Rate Swap BRL	18,679,272	3,735,133	7.95	3 month Brazilian CDI	1/2/2025	12,568
Interest Rate Swap CLP	1,812,000,000	2,362,089	1.66	6 month Chile Interbank Rate	4/23/2025	(134,464)
Interest Rate Swap COP	13,845,650,000	3,568,927	3.67	3 Month IBRCO	5/7/2025	(139,067)
Interest Rate Swap CNY	46,700,000	7,054,838	2.03	3 Month CNRR	5/29/2025	(185,799)
Interest Rate Swap CNY	123,770,000	18,880,583	2.30	3 Month CNRR	6/8/2025	(302,126)
Interest Rate Swap CNY	21,300,000	3,231,446	2.18	3 Month CNRR	6/15/2025	(68,145)
Interest Rate Swap ZAR	41,800,000	2,869,598	5.01	3 month JIBAR	6/25/2025	(60,220)
Interest Rate Swap CNY	117,579,000	18,201,976	2.60	3 month LIBOR	7/16/2025	(93,742)
Interest Rate Swap CNY	117,461,000	18,156,281	2.57	3 month LIBOR	7/20/2025	(114,777)
Interest Rate Swap CNY	50,000,000	7,714,221	2.66	3 month SHIBOR	9/17/2025	(31,811)
Interest Rate Swap CNY	69,975,000	10,781,454	2.54	3 Month CNRR	10/30/2025	(94,919)
Interest Rate Swap KRW	33,700,000,000	29,651,916	1.41	91 day CD-KSDA	3/12/2026	(288,147)
Interest Rate Swap MXN	343,065,000	16,903,102	6.03	28 day Mexican TIIE	3/19/2026	(369,825)
Interest Rate Swap USD	85,780,000	84,207,369	2.47	U.S. CPI URNSA	3/23/2026	(1,572,630)
Interest Rate Swap ZAR	19,885,000	1,397,153	5.61	3 month JIBAR	4/15/2026	(11,988)
Interest Rate Swap COP	23,100,000,000	6,063,567	4.60	3 Month IBRCO	6/10/2026	(122,829)
Interest Rate Swap PLN	13,685,000	3,609,554	1.48	6 month WIBOR	6/11/2026	11,940
Interest Rate Swap RUB	447,700,000	5,955,162	6.65	3 month MOSPR	6/16/2026	(189,958)
Interest Rate Swap RUB	300,000,000	3,979,276	6.65	3 month MOSPR	6/16/2026	(127,289)
Interest Rate Swap BRL	9,106,785	1,756,234	6.53	3 month Brazilian CDI	1/4/2027	(58,644)
Interest Rate Swap BRL	6,617,719	1,264,487	6.33	3 month Brazilian CDI	1/4/2027	(54,349)
Interest Rate Swap BRL	11,776,624	2,224,138	6.13	3 month Brazilian CDI	1/4/2027	(122,808)
Interest Rate Swap BRL	12,575,926	2,391,994	6.60	3 month Brazilian CDI	1/4/2027	(114,244)
Interest Rate Swap BRL	9,389,520	1,893,897	8.57	3 month Brazilian CDI	1/4/2027	22,673
Interest Rate Swap BRL	14,769,295	2,920,146	8.02	3 month Brazilian CDI	1/4/2027	(23,205)
Interest Rate Swap MXN	89,242,200	4,149,284	5.19	28 day Mexican TIIE	7/27/2027	(347,746)
Interest Rate Swap BRL	5,966,502	1,130,267	6.78	3 month Brazilian CDI	1/2/2029	(58,789)
Interest Rate Swap CZK	72,475,000	3,337,106	1.61	6 month PRIBOR	1/27/2030	(55,680)
Interest Rate Swap MXN	47,050,000	2,322,696	6.64	28 day Mexican TIIE	1/28/2030	(41,687)
Interest Rate Swap CZK	71,960,000	3,285,699	1.52	6 month PRIBOR	1/29/2030	(81,560)
						(continued)

(continued)						
Asset Description	Par	Gross Notional	TRS Receives	TRS Pays	Maturity Date	Fair Value 6/30/21
Interest Rate Swap HUF	938,520,000	\$3,035,589	1.96%	6 month BUBOR	5/5/2030	(\$135,054)
Interest Rate Swap MXN	112,524,000	5,052,015	5.49	28 day Mexican TIIE	1/23/2031	(605,502)
Interest Rate Swap ZAR	25,164,000	1,833,383	7.53	3 month JIBAR	4/13/2031	\$42,243
Interest Rate Swap MXN	38,690,000	1,907,992	6.66	28 day Mexican TIIE	4/28/2031	(43,831)
Interest Rate Swap MXN	29,100,000	1,456,601	6.92	28 day Mexican TIIE	5/14/2031	(7,186)
Interest Rate Swap MXN	37,990,000	1,869,962	6.65	28 day Mexican TIIE	5/28/2031	(45,831)
Interest Rate Swap CZK	50,408,000	2,318,842	1.73	6 month PRIBOR	6/15/2031	(26,586)
Interest Rate Swap USD	5,870,000	5,625,743	2.34	U.S. CPI URNSA	2/22/2051	(244,257)
Total Receive Fixed Interest Rat	e/Inflation Swaps:	\$562,624,067				(\$8,819,952)
i otto i i i i i i i i i i i i i i i i i	e,ation o stups.	4552,524,661				(40,020,002

BUBOR - Budapest Interbank Offered Rate, CDI - Cetip Interbank Deposit (interbank lending rate), CD-KSDA - Certificates of Deposit, Korean Securities Dealer Assoc., CNRR - China Fixing Repo Rates, CPI - Consumer Price Index, IBRCO - Columbia Interbank Rate, JIBAR - Johannesburg Interbank Agreed Rate, LIBOR - London Interbank Offered Rate, KLIBOR - Kuala Lumpur Interbank Offered Rate, MOSPR - MosPrime Rate, PRIBOR - Czech Interbank Offered Rate, SHIBOR - Shanghai Interbank Offered Rate, TIIE - Mexico Interbank Equilibrium Interest Rate, URNSA - Urban Consumers NSA Index 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, 2021, the aggregate fair value of non-exchange traded derivative instruments in asset positions was \$46,830,254. 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, 2021		
Aa2	\$5,055,692		
Aa3	23,064,420		
A1	6,428,494		
A2	5,097,032		
A3	7,184,616		
Total subject to credit risk	\$46,830,254		

Although the derivative instruments held within the TRS investment portfolio are executed with various counterparties, approximately 95 percent of the net market value exposure to credit risk is for non-exchange traded derivative contracts held with 10 counterparties.

5. INVESTMENT COMMITMENTS

Investments in certain limited partnerships commit TRS to possible future capital contributions. As of June 30, 2021, TRS had remaining unfunded commitments of \$12,478,928,848 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, 2021, the annual money-weighted rate of return on pension plan investments, net of investment expense, was 25.4 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 market value. These investments are not categorized in the fair value hierarchy.

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

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

The following table summarizes the valuation of TRS investments by the fair value hierarchy levels as of June 30, 2021.

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

		Fair Value Measurements Using		
Investments by fair value level	June 30, 2021	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	\$81,053	\$ -	\$81,053	\$ -
Commercial/collateralized mortgages & loans	289,996	-	289,996	-
Domestic corporate obligations	2,049,106	-	2,049,106	
Fixed income mutual funds	2,274,713	-	361,372	1,913,341
Foreign debt/corporate obligations	3,431,937	-	3,431,937	,
Municipals	5,220	-	5,220	
U.S. agencies obligations	110,914	-	110,914	
U.S. government-backed mortgages	681,894	-	681,894	
U.S. treasuries	650,004		650,004	
Total debt securities	9,574,837	<u>-</u>	7,661,496	1,913,341
Equity investments				
International common and preferred stock	11,206,327	11,170,918	35,409	
U.S. common and preferred stock	11,201,201	11,201,092	109	
Total equity investments	22,407,528	22,372,010	35,518	
Real assets				
Real estate	5,113,968	-	-	5,113,968
Total real assets	5,113,968		-	5,113,968
Total investments by fair value level	\$37,096,333	\$22,372,010	\$7,697,014	\$7,027,309
Investments measured at the net asset value (NAV)				
Commingled fixed income funds	\$645,905			
Diversifying strategies	5,541,737			
Private debt partnerships	4,069,872			
Private equity partnerships	10,178,045			
Private real estate partnerships	3,739,822			
Real asset partnerships	715,954			
Total investments measured at the NAV	24,891,335			
Total investments measured at fair value	\$61,987,668			
Investment derivative instruments				
Credit default swaps	\$719	\$ -	\$719	\$.
Index and variance swaps	3,189	· -	3,189	
Interest rate and inflation swaps	(9,335)	-	(9,335)	
Options/swaptions	21	-	21	
Total investment derivative instruments	(\$5,406)	\$ -	(\$5,406)	\$
Invested securities lending collateral		<u>·</u>		
Total invested securities lending collateral*	\$2,366,899	\$355,035	\$2,011,864	\$.
iotat invested securities tending collaterat"	,300,633		72,011,007	-

^{*} 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, 2021	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Commingled fixed income funds ¹	\$645,905	\$ -	Monthly, quarterly	30-45 days
Diversifying funds - liquid ²	5,232,163	-	Daily, weekly, monthly, quarterly	1-90 days
Diversifying funds - illiquid ³	309,574	215,051	Not eligible	N/A
Total diversifying strategies	5,541,737	215,051		
Custom private debt partnerships	1,710,443	306,370	Quarterly	60-90 days
Private debt partnerships	2,359,429	2,724,474	Not eligible	N/A
Total private debt partnerships ⁴	4,069,872	3,030,844		
Private equity partnerships ⁵	10,178,045	4,896,663	Not eligible	N/A
Private real estate partnerships ⁵	3,739,822	3,101,902	Not eligible	N/A
Real assets partnerships ⁶	715,954	1,234,469	Not eligible	N/A
Total investments measured at the NAV	\$24,891,335	\$12,478,929		

- 1) **Commingled fixed income funds:** The investment strategies for the three fixed income funds include 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 ranges from monthly to quarterly 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. Four factor portfolio direct investments include trend/momentum exposures and alternative risk premia. The systematic and discretionary macro strategies include direct investments in six funds diversifying through regional and product expertise, speed of algorithms and style of trading. Opportunistic funds, including five 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. The 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 four 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, 2021.

- 4) **Private debt partnerships:** Private debt funds consist of 50 funds investing across strategies such as stressed debt/credit, direct and specialty lending, real estate credit and global multi-credit strategies. Five 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 spans 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, 2021, however; during the fiscal year, TRS did sell one fund on the secondary market.
- 5) **Private equity and real estate partnerships:** TRS has 197 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 58 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 that 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 did not sell any private equity funds on the secondary market. As of June 30, 2021, 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 12 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. As of June 30, 2021, 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



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 \$79.9 billion in FY21 based on the actuarial value of assets.

2. MINIMUM RETIREMENT ANNUITY

	2021
Balances at June 30	\$ 10,902,940

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.

REQUIRED SUPPLEMENTARY INFORMATION

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

	2021	2020	2019	2018
Total pension liability				
Service cost	\$2,032,149,463	\$1,991,622,987	\$1,947,627,286	\$1,838,002,948
Interest	9,580,886,840	9,296,897,060	8,991,684,121	8,703,519,454
Changes of benefit terms	-	-	-	(374,603,419
Difference between expected and actual experience	(370,469,646)	(28,215,833)	258,778,925	1,191,346,970
Change of assumptions	(162,359,084)	-	77,241,572	(666,054,719
Benefit payments, including refund of member contributions	(7,388,142,712)	(7,099,524,955)	(6,818,760,572)	(6,551,634,376
Net change in total pension liability	3,692,064,861	4,160,779,259	4,456,571,332	4,140,576,858
Total pension liability - beginning	138,531,733,887	134,370,954,628	129,914,383,296	125,773,806,438
Total pension liability - ending (a)	142,223,798,748	138,531,733,887	134,370,954,628	129,914,383,296
Plan fiduciary net position				
Contributions - employer	97,594,081	92,658,238	88,514,781	84,633,117
Contributions - nonemployer contributing entity	5,140,648,356	4,813,451,679	4,466,020,692	4,095,125,358
Contributions - member	1,023,531,951	994,400,416	963,972,120	938,037,245
Net investment income (loss)	13,046,153,685	275,669,398	2,617,831,332	4,049,271,728
Benefit payments, including refund of member contributions	(7,388,142,712)	(7,099,524,955)	(6,818,760,572)	(6,551,634,376)
Administrative expense	(23,758,112)	(22,966,372)	(24,335,680)	(21,550,896
Net change in plan fiduciary net position	11,896,027,249	(946,311,596)	1,293,242,673	2,593,882,176
Plan fiduciary net position - beginning	52,316,477,771	53,262,789,367	51,969,546,694	49,375,664,518
Plan fiduciary net position - ending (b)	64,212,505,020	52,316,477,771	53,262,789,367	51,969,546,694
Employers' net pension liability - ending (a) - (b)	\$78,011,293,728	\$86,215,256,116	\$81,108,165,261	\$77,944,836,602

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:

	2021	2020	2019	2018
Total pension liability	\$142,223,798,748	\$138,531,733,887	\$134,370,954,628	\$129,914,383,296
Plan fiduciary net position	64,212,505,020	52,316,477,771	53,262,789,367	51,969,546,694
Net pension liability	\$78,011,293,728	\$86,215,256,116	\$81,108,165,261	\$77,944,836,602
Plan fiduciary net position as a percentage of the total pension liability	45.1%	37.8%	39.6%	40.0%
Covered payroll	\$11,120,776,122	\$10,827,438,800	\$10,450,452,444	\$10,163,980,000
Net pension liability as a percentage of covered payroll	701.5%	796.3%	776.1%	766.9%

2017	2016	2015	2014
\$1,877,570,053	\$1,681,242,232	\$1,948,079,771	\$1,894,351,211
8,390,352,464	8,264,257,311	7,864,916,421	7,561,104,814
-	-	-	-
482,486,212	701,827,169	(90,079,446)	39,950,212
(2,725,599,755)	7,553,894,504	1,136,454,886	-
(6,438,005,920)	(5,931,207,177)	(5,625,037,173)	(5,320,662,979)
1,586,803,054	12,270,014,039	5,234,334,459	4,174,743,258
124,187,003,384	111,916,989,345	106,682,654,886	102,507,911,628
125,773,806,438	124,187,003,384	111,916,989,345	106,682,654,886
149,495,577	148,040,767	145,591,585	158,334,598
3,986,363,699	3,742,469,245	3,377,664,945	3,438,382,892
929,130,165	951,809,398	935,451,049	928,745,853
5,520,453,001	(44,103,178)	1,770,549,533	6,782,031,720
(6,438,005,920)	(5,931,207,177)	(5,625,037,173)	(5,320,662,979)
(22,728,735)	(22,967,917)	(21,686,860)	(21,218,069)
4 124 707 707	(1.155.050.063)	F02 F22 070	F 00F 014 01F
4,124,707,787	(1,155,958,862)	582,533,079	5,965,614,015
45,250,956,731	46,406,915,593	45,824,382,514	39,858,768,499
49,375,664,518	45,250,956,731	46,406,915,593	45,824,382,514
\$76,398,141,920	\$78,936,046,653	\$65,510,073,752	\$60,858,272,372

2017	2016	2015	2014
\$125,773,806,438	\$124,187,003,384	\$111,916,989,345	\$106,682,654,886
49,375,664,518	45,250,956,731	46,406,915,593	45,824,382,514
\$76,398,141,920	\$78,936,046,653	\$65,510,073,752	\$60,858,272,372
39.3%	36.4%	41.5%	43.0%
\$9,965,569,893	\$9,811,614,284	\$9,641,170,627	\$9,512,809,680
766.6%	804.5%	679.5%	639.8%

Schedule of Investment Returns for Fiscal Years:

	2021	2020	2019	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expense	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)

	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Actuarially-determined contribution (ADC)	\$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	\$3,429,945
Contributions in relation to the actuarially-determined contribution:*										
State	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	2,405,172
Federal & Employer										
Contributions	97,082	92,038	87,707	84,034	148,749	147,408	144,780	157,228	155,787	153,409
Total contributions	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	2,558,581
Contribution										
deficiency	\$3,203,839	\$3,083,496	\$2,875,752	\$2,902,106	\$2,114,347	\$693,320	\$597,868	\$497,272	\$723,968	\$871,364
Covered payroll	\$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	\$9,321,098
Contributions as a percentage of covered payr	oll 47.1%	45.3%	43.6%	41.1%	41.5%	39.6%	36.5%	37.8%	30.4%	27.4%

^{*} 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.

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 FY21, they increased the total pension liability by \$3.7 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 FY21.

	For Funding per State Statute	For Determining the Actuarially-determined Contribution
Valuation Used to Determine		
Funding Amount:	June 30, 2019	June 30, 2019
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:	24 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

	2021	202
Personnel services		
Salaries	\$10,924,264	\$11,075,84
Retirement contributions	1,867,608	2,068,79
Insurance and payroll taxes	4,238,772	3,616,26
	17,030,644	16,760,89
Professional services		
Actuarial services	239,646	196,86
External auditors	225,356	270,91
Legal services	611,753	560,57
Legislative consulting	84,000	84,00
Information systems consulting	613,471	255,36
Operations consulting	231,158	437,80
Other	12,229	3,29
	2,017,613	1,808,8
Communications		
Postage	84,780	223,2
Printing and copying	44,671	65,9
Telephone	127,544	180,9
	256,995	470,2
Other services		
Administrative services	286,886	307,3
Building operations and maintenance	469,960	451,8
EDP supplies and equipment	160,767	132,1
Equipment repairs, rental and maintenance	221,639	235,0
Insurance	288,652	193,7
Memberships and subscriptions	82,577	112,9
Office equipment and furniture	56,891	130,4
Office supplies	17,505	14,2
Software licenses and maintenance	1,034,575	1,068,1
Travel, conferences, education	39,286	175,8
	2,658,738	2,821,8
Depreciation expense	1,794,122	1,104,6
Total administrative expenses	\$23,758,112	\$22,966,37

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

	2021	2020
Investment manager fees	\$445,990,695	\$375,519,105
Master custodian fees		
State Street Bank and Trust Company	3,847,375	3,534,575
Consulting services		
Aksia, L.L.C.	702,700	705,770
Aksia TorreyCove Partners, L.L.C.	100,000	-
Meketa Investment Group, Inc.	60,000	-
RVK, Inc.	465,000	465,000
Stepstone Group, L.P.	964,250	423,924
Stepstone Group Real Estate, L.P.	319,725	303,816
Stout Risius Ross, Inc.	-	137,500
TorreyCove Capital Partners, L.L.C.	-	1,024,750
	2,611,675	3,060,760
Legal services		
DLA Piper, L.L.P.	783,359	715,269
Tax advisory services		
Ernst & Young Private, Ltd.	110,892	93,918
Other investment expense		
Auditing costs	368,886	178,800
Communication services	21,730	22,905
Education, meetings and travel	9,498	86,953
Foreign tax expense	22,876,576	14,642,338
Investment activity expenses	3,561,776	552,156
Investment analytical systems	1,053,172	903,027
Personnel costs	4,898,704	5,145,178
Research, subscriptions and memberships	68,401	99,796
Other costs	220,569	110,651
	33,079,312	21,741,804
Total investment expenses	\$486,423,308	\$404,665,431

SCHEDULE OF PROFESSIONAL SERVICES FOR THE YEARS ENDED JUNE 30

	2021	2020
Actuarial services		
The Segal Company Midwest, Inc.	\$239,646	\$196,868
External auditors		
Office of the Auditor General (BKD, L.L.P.)	225,356	270,919
Legal services		
Elrod Friedman L.L.P.	136,302	106,519
Holland & Knight, L.L.P.	43,560	78,632
Howard & Howard Attorneys, P.L.L.C.	13,421	3,597
King & Spalding L.L.P.	361,862	285,887
Kopec White & Spooner	2,720	1,000
Reinhart Boerner Van Deuren s.c.	49,288	83,193
Whitt Law, L.L.C.	4,600	1,750
	611,753	560,578
Legislative consulting		
Leinenweber Baroni & Daffada Consulting, L.L.C.	84,000	84,000
Information systems consulting		
AT & T Corp.	590	-
Blu Age Corporation	-	12,938
Carahsoft Technology Corp.	14,193	-
CDW L.L.C.	42,800	-
Dayagdag, Chris	153,520	-
Digital Check Corp.	-	4,350
Excelon Development II L.L.C.	-	14,155
FireEye Inc.	18,538	-
HSO North America, L.L.C.	84,420	130,117
McDonald Hopkins L.L.C.	1,462	-
Mellor, William Thomas	10,400	-
ProCircular, Inc.	21,850	17,100
Promet Solutions Corporation	47,375	36,563
Provaliant Retirement, L.L.C.	-	378
The Segal Company Midwest Inc.	188,773	-
Sentinel Technologies, Inc.	7,800	39,763
VPMA Global Services L.L.C.	21,750	-
	613,471	255,364
Operations consulting		
CAPFinancial Partners, L.L.C. (formerly known as Cammack Retirement Group, Inc.)	-	220,000
CEM Benchmarking, Inc.	50,000	50,000
Darlington & Company, Inc.	23,300	36,653
Higher Logic, L.L.C.	10,396	10,396
Jasculca Terman Strategic Communications	30,000	96,000
Korn Ferry (US)	95,680	_
Levi Ray & Shoup, Inc.	-	17,500
Management Association	-	5,606
SABA Software	1,782	1,650
The Segal Co Western Stats Inc.	20,000	-
	231,158	437,805
Other	12,229	3,295



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

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

Report on the Financial Statements

As Special Assistant Auditors for the Auditor General, we have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Teachers' Retirement System of the State of Illinois (System), a component unit of the State of Illinois, as of and for the year ended June 30, 2021, and the related notes to the financial statements, which collectively comprise the System's basic financial statements, and have issued our report thereon dated December 13, 2021, which contained an emphasis of matter paragraph regarding actuarial assumptions used in the actuary's calculation of the net pension liability.

Compliance and Other Matters

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

Internal Control Over Financial Reporting

Management of the System is responsible for establishing and maintaining effective internal control over financial reporting (internal control).



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

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

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit, we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Purpose of this Report

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

SIGNED ORIGINAL ON FILE

Decatur, Illinois December 13, 2021