STATE EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF ILLINOIS

FINANCIAL AUDIT
FOR THE YEAR ENDED JUNE 30, 2020

PERFORMED AS SPECIAL ASSISTANT AUDITORS
FOR THE AUDITOR GENERAL, STATE OF ILLINOIS

State Employees' Retirement System
of the State of Illinois

Financial Audit

For the Year Ended June 30, 2020

Table of Contents

Other Reports Issued Under a Separate Cover

The State Employees' Retirement System's *Compliance Examination* for the year ended June 30, 2020, will be issued under a separate cover. Additionally, the State Employees' 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 certain agencies and fund employers of 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.

State Employees’ Retirement System
of the State of Illinois

Financial Audit
For the Year Ended June 30, 2020

System Officials

Executive Secretary	Timothy B. Blair
Accounting Division Manager	Alan Fowler, CPA
Legal Counsel (12/1/2019 to present)	James Stivers
Legal Counsel (7/1/2019 to 12/1/2019)	Vacant
Chief Internal Auditor	Casey Evans

Governing Board Members

Office Locations

Springfield Office
2101 South Veterans Parkway
P.O. Box 19255
Springfield, Illinois 62794-9255

Chicago Office
State of Illinois Building
160 North LaSalle Street, Suite N725
Chicago, Illinois 60601

Financial Statement Report

Summary

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

Based on their audit and the report of other auditors, 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 Casey Evans, Chief Internal Auditor, on December 7, 2020.

Independent Auditor's Report

Honorable Frank J. Mautino, Auditor General – State of Illinois

Board of Trustees, State Employees' 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 State Employees' Retirement System (System), a pension trust fund of the State of Illinois, as of June 30, 2020, 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 did not audit the 2020 financial statements of the Illinois State Board of Investment, an internal investment pool of the State of Illinois, which statements represent 97 percent, 97 percent and 24 percent, respectively, of total assets, net position restricted for pension benefits, and total additions of the System. Those financial statements were audited by other auditors whose report thereon has been furnished to us, and our opinion, insofar as it relates to the amounts included for the Illinois State Board of Investment is based solely on the report of other auditors. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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

Opinion
In our opinion, based on our audit and the report of other auditors, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the System as of June 30, 2020, and the changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter
The actuarially determined net pension liability, calculated as required by GASB Statement No. 67, is dependent on several assumptions including the assumption that future required contributions from State sources are made based on statutory requirements in existence as of the date of this report. These assumptions and required contributions are discussed in Notes 5 and 6 of the financial statements on pages 26 through 28. 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 on pages 5 through 7 and the required supplementary information as listed in the table of contents on pages 33 through 37 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 and other auditors 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 was conducted for the purpose of forming an opinion on the System's basic financial statements. The supplementary financial 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.

The supplementary financial information as listed in the table of contents 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. Such information 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 underlying accounting and other records used to prepare the basic financial statements, or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America by us and other auditors. In our opinion, based on our audit, the procedures performed as described above, and the report of other auditors, the supplementary financial 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.

Other Reporting Required by *Government Auditing Standards*
In accordance with *Government Auditing Standards*, we have also issued our report dated December 17, 2020 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

Schaumburg, Illinois
December 17, 2020

This section presents management's discussion and analysis of the financial position and performance of the State Employees' Retirement Systems of Illinois (System) for the year ended June 30, 2020. It is presented as a narrative overview and analysis.

The System is a defined benefit, single-employer public employee retirement system. It provides services to approximately 62,600 active state employees, 3,800 vested inactive members, and 75,400 benefit recipients. Throughout this discussion and analysis, units of measure (i.e. billions, millions, thousands) are approximate, being rounded up or down to the nearest tenth of the respective unit value.

OVERVIEW OF THE FINANCIAL STATEMENTS

This discussion and analysis is intended to serve as an introduction to the System's financial reporting which is comprised of the following components:

1. Basic Financial Statements and Notes. For the fiscal year ended June 30, 2020, basic financial statements are presented for the System. This information presents the fiduciary net position restricted for pensions for the System as of June 30, 2020. This financial information also summarizes the changes in fiduciary net position restricted for pensions for the year then ended. The notes to the Financial Statements provide additional information that is essential to achieve a full understanding of the data provided in the basic financial statements.
2. Required Supplementary Information. The required supplementary information consists of three schedules and related notes concerning actuarial information, funded status, investment returns and information on State contributions.
3. Other Supplementary Schedules. Other schedules include more detailed information pertaining to the System, including schedules of revenues by source, cash receipts and disbursements, and payments to consultants and advisors.

FINANCIAL HIGHLIGHTS

- The fiduciary net position increased by $705.3 million during fiscal year 2020. This change was primarily the result of an increase in investments of $624.2 million.
- The System's Plan Fiduciary Net Position as a percentage of the Total Pension Liability was 35.5% as of June 30, 2020.
- The overall rate of return for the Illinois State Board of Investment (ISBI) Commingled Fund was a gain of 4.6% in fiscal year 2020. The System's annual money-weighted rate of return on its investment in the ISBI Commingled Fund was a gain of 4.7% for fiscal year 2020.

Condensed Statements of Fiduciary Net Position
(in millions)

	As of June 30		Increase/(Decrease) from
	2020	2019	2019 to 2020
Cash	$ 285.0	$ 211.3	$ 73.7
Receivables	287.2	293.3	(6.1)
Investments, at fair value *	18,692.4	18,068.2	624.2
Capital Assets, net	12.1	10.7	1.4
Total assets	19,276.7	18,583.5	693.2
Liabilities *	79.5	91.6	12.1
Total fiduciary net position	$ 19,197.2	$ 18,491.9	$ 705.3

** Including securities lending collateral*

ADDITIONS TO FIDUCIARY NET POSITION

Additions to Fiduciary Net Position include employer and participant contributions and net income from investment activities. Participant contributions were approximately $271.7 million and $275.7 million for the years ended June 30, 2020 and June 30, 2019, respectively. Participant contribution rates are set by statute as a percentage of gross salary. For fiscal year 2020, employer contributions increased to approximately $2,368.9 million from $2,274.9 million in fiscal year 2019. The net investment income for fiscal year 2020 was $829.3 million, which was down from the net investment gain from fiscal year 2019 of $1,118.4 million.

DEDUCTIONS FROM FIDUCIARY NET POSITION

Deductions from Fiduciary Net Position are primarily benefit payments. During fiscal years 2020 and 2019, the System paid out approximately $2,727.8 million and $2,601.3 million, respectively, in benefits. This increase in benefit payments of approximately 4.8% from 2019 to 2020 is mainly the result of the annual scheduled 3% increase in retirement and other benefit payments. Also attributing to the increase was the increased number of beneficiaries, with approximately a 1.0% increase from 2019 to 2020. Refunds were consistently just under 1% of the total deductions in each of the fiscal years presented and administrative costs of the System represented less than 1% of the total deductions in each of the fiscal years presented within the condensed statements.

Condensed Statements of Changes in Fiduciary Net Position
(in millions)

	For the Year Ended June 30, 2020	For the Year Ended June 30, 2019	Increase/(Decrease) from 2019 to 2020
Additions			
Participant contributions	$ 271.7	$ 275.7	$ (4.0)
Employer contributions	2,368.9	2,274.9	94.0
Net investment income (loss)	829.3	1,118.4	(289.1)
Total additions	3,469.9	3,669.0	(199.1)
Deductions			
Benefits	2,727.8	2,601.3	126.5
Refunds	19.4	24.1	(4.7)
Administrative expenses	17.4	15.0	2.4
Total deductions	2,764.6	2,640.4	124.2
Net increase\(decrease) in fiduciary net position	$ 705.3	$ 1,028.6	$ (323.3)

FUNDED RATIO

The funded ratio of the plan measures the ratio of the fiduciary net position against the total pension liability and is one indicator of the fiscal strength of a pension fund's ability to meet obligations to its members. An annual actuarial valuation is performed. The most recent available valuation showed the funded status of the System was 35.51% on June 30, 2020. The amount by which the total pension liability exceeded the fiduciary net position was $34.9 billion at June 30, 2020.

INVESTMENTS

Investments of the System are combined in an internal commingled investment pool held by the Illinois State Board of Investment (ISBI). The other entities participating in this commingled pool are the Judges' Retirement System, the General Assembly Retirement System and one other state agency. The investments of this other state agency are immaterial to the total commingled investment pool. Each participating entity owns an equity position in the pool and receives proportionate investment income from the pool in accordance with respective ownership percentage. Investment gains or losses are reported in the Statement of Changes in Net Position of each retirement system.

The net investment gain of the total ISBI Commingled Fund was approximately $878.5 million during fiscal year 2020, resulting in a positive return of 4.6%. The actual rate of return earned by the System will vary from the return earned on the total ISBI Commingled Fund as the result of overall market conditions at the time of additional investments in or withdrawals from the ISBI Commingled Fund. For the three, five, and ten year period ended June 30, 2020, the ISBI Commingled Fund earned a compounded rate of return of 6.4%, 6.1%, and 8.7%, respectively.

The ISBI is exposed to general market risk. This general market risk is reflected in asset valuations fluctuating with market volatility. Any impact from market volatility on the ISBI's investment portfolio depends in large measure on how deep the market downturn is, how long it lasts, and how it fits within fiscal year reporting periods. The resulting market risk and associated realized and unrealized gains and losses could significantly impact the ISBI's financial condition. In light of the current global COVID-19 pandemic and associated national and global economic volatility, readers of these financial statements are advised that financial markets remain volatile and may experience significant changes on a daily basis.

FUTURE OUTLOOK

All actuarial assumptions used in the June 30, 2020 funding valuation were based on the experience review for the three years ended June 30, 2018. The state's statutory (employer) contribution rate for fiscal year 2021, determined by the actuarial valuation, will increase from 54.290% to 54.831% or an additional 0.541% of employee covered payroll. Total employee headcount is expected to remain level.

Tier 2 active members' annual pensionable earnings were capped at $115,929 in 2020 and will be capped at $116,740 in 2021. The caps on Tier 2 members' calendar year earnings decrease the anticipated amount of future earnings credit as well as the associated contributions.

Eligible retiring SERS members have the option to elect the COLA buyout created by Public Act 100-0587. Retiring Tier 1 members may elect to receive a delayed and reduced COLA, and in return receive a lump sum accelerated benefit equal to 70% of the actuarily determined present value of the difference between the traditional COLA and the reduced COLA. The amount of the accelerated benefit is paid from the Pension Trust Fund but then reimbursed from a dedicated bond fund. The participation rate for this new benefit option has been approximately 22.3% among eligible regular formula members and 33.9% among eligible alternative formula members. Participation is expected to be maintained at these levels for the foreseeable future.

Public Act 100-0587 also created a Total buyout option for inactive vested SERS participants. This program allows vested inactive members to receive a lump sum payment equal to 60% of the present value of projected benefits. This component of the program has had a much lower participation rate, but additional details are being provided to eligible inactive members in their current annual statements. Through these efforts, additional experience will be gained to gauge the acceptability of this option among eligible members.

Benefit payments are projected to continue to grow at a rate of approximately 6% to 8% annually, primarily due to the growth in the number of annuitants and the 3% annual COLA.

The COVID-19 global pandemic continues to have an impact on our day to day business operations. Staff have modified work schedules so that they work from home but rotate into the office, as needed, to handle some of the priority transactions that can't be done, remotely. We will continue our operations in the safest possible way for the SERS staff while ensuring that transactions continue to be processed for all SERS members.

The ISBI plans to continue to accomplish its strategy of seeking to maximize the likelihood of meeting long-term return objectives while maintaining prudent risk exposure and controlling fees and expenses related to the management of the fund.

REQUESTS FOR INFORMATION

This financial report is designed to provide a general overview of the System's finances. For questions concerning the information in this report or for additional information, contact the Accounting Division of the State Employees' Retirement System at srsacctgdiv@srs.illinois.gov.

STATE EMPLOYEES' RETIREMENT SYSTEM OF ILLINOIS

Statement of Fiduciary Net Position

June 30, 2020

Assets	
Cash	$ 284,998,900
Receivables:	
Participants' contributions	16,433,064
Employer contributions	264,075,077
Other accounts	6,759,380
Total receivables	287,267,521
Investments:	
Investments - held in the Illinois State Board of Investment Commingled Fund at fair value	18,637,515,974
Securities lending collateral with State Treasurer	54,881,000
Total Investments	18,692,396,974
Capital Assets, net	12,081,146
Total Assets	19,276,744,541
Liabilities	
Benefits payable	8,094,146
Refunds payable	1,901,332
Administrative expenses payable	1,788,184
Participants' deferred service credit accounts	1,095,555
Due to the State of Illinois	11,711,972
Securities lending collateral	54,881,000
Total Liabilities	79,472,189
Net position-restricted for pensions	$ 19,197,272,352

See accompanying notes to financial statements.

STATE EMPLOYEES' RETIREMENT SYSTEM OF ILLINOIS

Statement of Changes in Fiduciary Net Position for the Year Ended June 30, 2020

Additions:	
Contributions:	
Participants	$ 271,749,009
Employer	2,368,905,396
Total Contributions	2,640,654,405
Investment income:	
Net appreciation/(depreciation) in fair value of investments	644,850,428
Interest and dividends	209,466,565
Less investment expense	(24,988,274)
Net investment income/(loss)	829,328,719
Total Additions	3,469,983,124
Deductions:	
Benefits:	
Retirement annuities	2,492,176,294
Survivor annuities	160,955,392
Disability benefits	62,947,464
Lump sum benefits	11,741,683
Total Benefits	2,727,820,833
Refunds *(including transfers to reciprocating systems)*	19,366,029
Administrative	17,412,562
Total Deductions	2,764,599,424
Net increase/(decrease) in net position	705,383,700
Net position restricted for pensions	
Beginning of year	18,491,888,652
End of year	$ 19,197,272,352

See accompanying notes to financial statements.

STATE EMPLOYEES' RETIREMENT SYSTEM OF ILLINOIS

Notes to Financial Statements June 30, 2020

1. Reporting Entity

Generally accepted accounting principles require that the financial reporting entity include: 1) the primary government; 2) organizations for which the primary government is financially accountable; and 3) other organizations for which the nature and significance of their relationship with the primary government are such that exclusion would cause the reporting entity's financial statements to be misleading or incomplete.

The State Employees' Retirement System of Illinois (System) is administered by a Board of Trustees consisting of thirteen persons, which includes: a. the Comptroller, who shall be the Chairperson; b. six persons appointed by the Governor with the advice and consent of the Senate who may not be members of the system or hold an elective State office and who shall serve for a term of 5 years, except that the terms of the initial appointees under the amendatory Act of the 96th General Assembly shall be as follows: 3 for a term of 3 years and 3 for a term of 5 years; c. four active participants of the System having at least 8 years of creditable service, to be elected from the contributing members of the System by the contributing members; and d. two annuitants of the System who have been annuitants for at least one full year, to be elected from and by the annuitants of the System. Operation of the System and the direction of its policies are the responsibility of the Board of Trustees of the System.

Based on the criteria of the Governmental Accounting Standards Board Statement No. 61, there are no other state agencies, boards or commissions, or other organizations required to be combined with the System. However, the System is a pension trust fund of the State of Illinois financial reporting entity, and is to be combined and included in the State of Illinois' comprehensive annual financial report.

At June 30, 2020, participation levels in the System were as follows:

State agencies	42
State boards and commissions	38
TOTAL	80

Retirees and beneficiaries currently receiving benefits:	
Retirement annuities	61,819
Survivors' annuities	10,630
Disability benefits	1,923
TOTAL	74,372 [a]
Inactive employees entitled to benefits, but not yet receiving them	3,774
TOTAL	78,146
Current Employees:	
Vested: Coordinated with Social Security	31,427
Noncoordinated	1,528
Nonvested: Coordinated with Social Security	28,846
Noncoordinated	820
TOTAL	62,621

a. The total excludes 983 Qildro payees who receive a portion of the Retirement Annuitants monthly benefit.

2. Plan Description

The System is the administrator of a single-employer, defined benefit public employee retirement system (PERS) established and administered by the State of Illinois to provide pension benefits for its employees. The plan is comprised of two tiers of contribution requirements and benefit levels. The provisions below apply to both Tier 1 & 2 employees, except where noted. A summary of the plan provisions pertaining to eligibility and membership, contributions, and benefits are displayed in the table below:

a. Eligibility and Membership

Generally, anyone entering state service, except those in positions subject to membership in certain other state sponsored retirement systems, persons employed after June 30, 1979 as public service employment program participants under the Federal CETA program, and other exceptions as indicated in state law, become members of the System immediately.

Employees appointed by the Governor and requiring confirmation by the State of Illinois Senate may elect to become members of the System.

b. Employee Contributions

Participating members contribute specified percentages of their salaries for retirement annuities and survivors' annuities in accordance with Chapter 40, Section 5/14-133 of the Illinois Compiled Statutes (ILCS).

Contributions are excluded from gross income for Federal and State income tax purposes. The total contribution rate is 4% if the member is covered by Social Security and 8% if the member is not covered. Certain employment categories which are eligible for benefits under alternative formulas contribute at the rate of 8 1/2% or 12 1/2% depending upon whether or not the employee is covered by Social Security. Participants' contributions are fully refundable, without interest, upon withdrawal from state employment.

Tier 1	Tier 2
No annual compensation limit on contributions.	Beginning on or after January 1, 2011, annual compensation on which contributions are taken cannot exceed $106,800. This amount increases annually by 3% or one-half of the Consumer Price Index, whichever is less. The salary limit for calendar year 2020 is $115,929.

c. Employer Contributions

The State of Illinois is obligated to make payment for the required departmental employer contributions, all allowances, annuities, any benefits granted under Chapter 40, Article 5/14 of the ILCS and all administrative expenses of the System to the extent specified in the ILCS. State law provides that the employer contribution rate be determined based upon the results of each annual actuarial valuation.

d. Retirement Annuity Benefits

The System is governed by Chapter 40, Article 5/14 of the ILCS. Vesting and benefit provisions of the System are defined in the ILCS. The retirement annuity is based on the member's final average compensation and the number of years of service credit that have been established. The retirement benefit formula available to general state employees is 1.67% for each year of covered service and 2.2% for each year of noncovered service. Alternative formula employees have a formula of 2.5% for covered service and 3.0% for noncovered service.

The maximum retirement annuity payable is 75% of final average compensation for regular employees and 80% for alternative formula employees. The minimum retirement annuity payable is $15.00 for each year of covered employment and $25.00 for each year of noncovered employment.

Regular Formula Tier 1

A member must have a minimum of eight years of service credit and may retire at:

• Age 60, with 8 years of service credit.

• Any age, when the member's age (years & whole months) plus years of service credit (years & whole months) equal 85 years (1,020 months) (Rule of 85) with eight years of credited service.

• Between ages 55-60 with 25-30 years of service credit (reduced 1/2 of 1% for each month under age 60).

The retirement benefit is based on final average compensation and credited service. Final average compensation is the 48 highest consecutive months of service within the last 120 months of service.

Under the Rule of 85, a member is eligible for the first 3% increase on January 1 following the first full year of retirement, even if the member is not age 60. If the member retires at age 60 or older, he/she will receive a 3% pension increase every year on January 1, following the first full year of retirement.

If the member retires before age 60 with a reduced retirement benefit, he/she will receive a 3% pension increase every January 1 after the member turns age 60 and has been retired at least one full year. These pension increases are not limited by the 75% maximum.

Regular Formula Tier 2

A member must have a minimum of 10 years of credited service and may retire at:

• Age 67, with 10 years of credited service.

• Between ages 62-67 with 10 years of credited service (reduced 1/2 of 1% for each month under age 67).

The retirement benefit is based on final average compensation and credited service. For regular formula employees, final average compensation is the average of the 96 highest consecutive months of service within the last 120 months of service. The retirement benefit is calculated on a maximum salary of $106,800. This amount increases annually by 3% or one-half of the Consumer Price Index, whichever is less.

If the member retires at age 67 or older, he/she will receive a pension increase of 3% or one-half of the Consumer Price Index for the preceding calendar year, whichever is less, every year on January 1, following the first full year of retirement. The salary limit for calendar year 2020 is $115,929.

If the member retires before age 67 with a reduced retirement benefit, he/she will receive a pension increase of 3% or one-half of the Consumer Price Index for the preceding calendar year, whichever is less, every January 1 after the member turns age 67 and has been retired at least one full year. These pension increases are not limited by the 75% maximum.

Alternative Formula Tier 1

Members eligible for the alternative formula may retire at age 50 with 25 years of service credit, or at age 55 with 20 years of service credit.

Final average compensation is figured one of three ways:

• The average of the highest 48 consecutive months over the last 120 months of service (for members in service prior to January 1, 1998).

• Average of last 48 months of service.

• Final rate of pay: cannot exceed the average of the last 24 months of pay by 115%.

Alternative formula retirees receive their first 3% pension increase on January 1 following the first full year of retirement after age 55. These increases are not limited by the 80% maximum.

Alternative Formula Tier 2

Members eligible for the alternative formula may retire at age 60 with 20 years of service.

Final average compensation is the average monthly salary during the 96 highest consecutive months of service within the last 120 months. The retirement benefit is calculated on a maximum salary of $106,800. This amount increases annually by 3% or one-half of the Consumer Price Index, whichever is less. The salary limit for calendar year 2020 is $115,929.

Alternative formula retirees receive their first pension increase of 3% or one-half of the Consumer Price Index for the preceding calendar year, whichever is less, following the first full year of retirement after age 60. These increases are not limited by the 80% maximum.

e. Disability & Death Benefits

Occupational and nonoccupational (including temporary) disability benefits are available through the System. To be eligible for nonoccupational (including temporary) disability benefits, an employee must have at least eighteen months of credited service with the System.

The nonoccupational (including temporary) disability benefit is equal to 50% of the monthly rate of compensation of the employee on the date of removal from the payroll. Occupational disability benefits are provided when the member becomes disabled as a direct result of injuries or diseases arising out of and in the course of state employment. The monthly benefit is equal to 75% of the monthly rate of compensation on the date of removal from the payroll. This benefit amount is reduced by Workers' Compensation or payments under the Occupational Diseases Act.

Occupational and nonoccupational death benefits are also available through the System. Certain nonoccupational death benefits vest after eighteen months of credited service. Occupational death benefits are provided from the date of employment.

Tier 1	Tier 2
For disability benefits, final average compensation is the rate of pay on the date of the disability, or the 48 highest consecutive months of service within the last 10 years, whichever is greater.	For disability benefits, final average compensation is the rate of pay on the date of the disability, or the 96 highest consecutive months of service within the last 10 years, whichever is greater. The disability benefit is calculated on a maximum salary of $106,800. The salary limit for calendar year 2020 is $115,929.

3. Summary of Significant Accounting Policies & Plan Asset Matters

a. Basis of Accounting
The financial transactions of the System are maintained and these financial statements have been prepared using the accrual basis of accounting in conformity with generally accepted accounting principles. Employee and employer contributions are recognized as revenues when due pursuant to statutory requirements.

Benefits and refunds are recognized as expenses when due and payable in accordance with the terms of the plan.

b. Cash
The System retains all of its available cash in a commingled investment pool managed by the Treasurer of the State of Illinois (Treasurer). All deposits are fully collateralized by the Treasurer.

“Available cash” is determined to be that amount which is required for the current operating expenditures of the System. The excess of available cash is transferred to the Illinois State Board of Investment (ISBI) for purposes of long-term investment for the System.

c. Implementation of New Accounting Standards
The Governmental Accounting Standards Board (GASB) issued Statement No. 95, “Postponement of the Effective Dates of Certain Authoritative Guidance” which postponed the effective dates for implementation of certain new pronouncements to provide relief to governments and other stakeholders in light of the COVID-19 pandemic.

GASB Statement No. 84, “Fiduciary Activities”, established criteria for identifying fiduciary activities of state and local governments. The focus of the criteria generally is on (1) whether a government is controlling the assets of the fiduciary activity and (2) the beneficiaries with whom a fiduciary relationship exists. This GASB is now effective for fiscal periods beginning after December 15, 2019 (FY 2021) and it will have no impact as the System is already accounted for as a fiduciary activity.

GASB Statement No. 87, “Leases”, requires the recognition of certain lease assets and liabilities for leases that were previously classified as operating leases. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. A lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments’ leasing activities. This GASB is effective for fiscal periods beginning after June 15, 2021 (FY 2022). The System is working with the Illinois Comptroller’s Office to identify any impacts to its financial reporting process because of this pronouncement.

GASB Statement No. 90, “Majority Equity Interests”, addresses whether a government’s majority equity interest in a legally separate organization represents an investment or a component unit. It defines a majority equity interest and specifies that a majority equity interest in a legally separate organization should be reported as an investment if a government’s holding of the equity interest meets the definition of an investment. This GASB is now effective for fiscal periods beginning after December 31, 2019 (FY 2021) but should not impact the System significantly, due to a pension fund’s ability to account for a majority equity investment at fair value under GASB 72.

GASB Statement No. 92, “Omnibus 2020” modifies requirements related to leases, reinsurance recoveries, and the terminology used to refer to derivative instruments. This portion of this GASB that pertains to the System is now effective for FY 2021 (terminology used for derivative instruments), however, it has been implemented by the System and the ISBI for the FY 2020 fiscal period.

d. Methods Used to Value Investments
Investments are managed by the ISBI pursuant to Chapter 40, Article 5/22A of the Illinois Compiled Statutes (ILCS) and are maintained in the ISBI Commingled Fund.

Investments owned are reported at fair value. Units of the ISBI Commingled Fund are issued to the participating entities on the last day of the month based on the unit net asset value calculated as of that date. Net investment income of the ISBI Commingled Fund is allocated to each of the participating entities on the last day of the month on the basis of percentage of accumulated units owned by the respective systems. Management expenses are deducted monthly from income before distribution.

The investment authority of the ISBI is provided in Chapter 40, Section 5/22A-112 of the ILCS. Such investment authority requires that all opportunities be undertaken with care, skill, prudence and diligence given prevailing circumstances that a prudent person acting in like capacity and experience would undertake.

e. Actuarial Experience Review
In accordance with Illinois Compiled Statutes, an actuarial experience review is to be performed at least once every three years to determine the adequacy of actuarial assumptions regarding the mortality, retirement, disability, employment, turnover, interest and earnable compensation of the members and beneficiaries of the System. An experience review was last performed for the three-year period July 1, 2015 to June 30, 2018 resulting in the adoption of new assumptions as of June 30, 2019. Assumption changes include changes to the investment returns, rate of inflation, mortality and other as detailed in the Required Supplementary Information of this CAFR.

f. Administrative Expenses
Expenses related to the administration of the System are financed through investment earnings and employer retirement contributions. These expenses are budgeted and approved by the System's Board of Trustees.

g. Risk Management
The System, as part of the primary government of the State, provides for risks of loss associated with workers' compensation and general liability through the State's self-insurance program. The System obtains commercial insurance for fidelity, surety, and property. There have been no commercial insurance claims in the past four fiscal years.

h. General Litigation
The System is subject to claims and lawsuits that arise primarily in the ordinary course of business. It is the opinion of management that the disposition or ultimate resolution of such claims and lawsuits will not have a material adverse effect on the fiduciary net position or the changes in fiduciary net position of the System.

i. Use of Estimates
In preparing financial statements in conformity with U.S. generally accepted accounting principles, the System makes estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements, as well as the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates and assumptions.

4. Investments

Introduction

Investments of the System are combined in a commingled internal investment pool and held by the Illinois State Board of Investment (ISBI). The System owns approximately 94.1% ($18,637,515,974) of the net position of the ISBI commingled fund as of June 30, 2020. A schedule of investment expenses is included in the ISBI's annual report.

For additional information on ISBI's investments, please refer to their Annual Report as of June 30, 2020. A copy of the report can be obtained from the ISBI at 180 North LaSalle Street, Suite 2015, Chicago, Illinois 60601 or by visiting their website, https://www.isbinvestment.com.

Summary of the ISBI Fund's investments at fair value by type

	June 30, 2020
U.S. govt. agency and municipal obligations	$ 237,703,276
Domestic Equities	2,852,607,404
International Equities	235,312,041
Domestic Bank Loans	242,975,580
Domestic Obligations	733,705,710
International Obligations	284,182,790
Commingled Funds	10,918,731,709
Hedge Funds	46,354,758
Real Estate Funds	1,960,846,320
Private Equity Funds	942,875,216
Infrastructure Funds	279,399,854
Opportunistic Debt Funds	822,484,844
Restricted cash (subscription advance)	40,000,000
Measured at amortized cost:	
Money market instruments	212,665,371
Total investments	$ 19,809,844,873

Rate of Return

For the fiscal year ended June 30, 2020, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 4.7%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Deposits

Custodial credit risk for deposits is the risk that, in the event of a financial institution failure, the System's and ISBI's deposits may not be returned. All non-investment related bank balances at year end are insured or collateralized with securities held by the Illinois State Treasurer or agents in the name of the State Treasurer. As of June 30, 2020, the ISBI had a non-investment related bank balance of $993,049. A Custodial Credit Risk Policy was implemented by the ISBI staff and formally adopted by the ISBI Board in July of 2007. The policy outlines the control procedures used to monitor custodial credit risk. These assets are under the custody of Northern Trust. Northern Trust has an AA- Long-term Deposit/Debt rating by Standard & Poor's and an Aa2 rating by Moody's. Certain investments of the ISBI with maturities of 90 days or less would be considered cash equivalents; these consist of short-term investment funds and U.S. Treasury bills with maturities of 90 days or less, which are not subject to the custodial credit risk. For financial statement presentation and investment purposes, the ISBI reports these types of cash equivalents as Money Market Instruments within their investments. As of June 30, 2020, the ISBI had an investment related bank balance of $12,817,741. This balance includes USD and foreign cash balances. Cash held in the investment related bank account is neither federally insured nor collateralized for amounts in excess of $250,000. However, the ISBI is the beneficiary of multiple policies and bonds held by Northern Trust providing for recovery of various potential losses related to services provided by Northern Trust as the ISBI's custodian. At any given point and time, the foreign cash balances may be exposed to custodial credit risk.

Investment Commitments

The ISBI had total investment commitments of $2.4 billion at the end of fiscal year 2020. The ISBI's real estate, private equity, infrastructure and opportunistic debt investment portfolios consist of passive interests in limited partnerships. The ISBI would fund outstanding commitments by utilizing available cash and then selling liquid securities in the portfolio as necessary.

Investment Liquidity

The majority of the ISBI's portfolio is highly liquid. However, the ISBI holds investments in hedge funds, real estate funds, opportunistic debt funds, private equity funds, commingled funds, bank loans and infrastructure funds that are considered illiquid by the very nature of the investment. Market risk exists with respect to these investments as the ISBI may not be able to exit from the illiquid investments during periods of significant market value declines.

Alternative Investments

The ISBI's investments in alternative investment vehicles consist of Commingled Funds, Private Equity Funds, Hedge Funds, Infrastructure Funds, Opportunistic Debt Funds and Real Estate Funds. These types of vehicles are used for making investments in various equity and debt securities according to the investment strategies as determined by the fund managers at the commencement of the fund.

Fair Value Measurements

Fair value is the amount that would be received to sell the investment in an orderly transaction between market participants at the measurement date (i.e. exit price). The fair value measurements are determined within a framework that utilizes a three-tier hierarchy, which maximizes the use of observable inputs and minimizes the use of unobservable inputs. Investments measured and reported at fair value are classified and disclosed in one of the following categories:

- Level 1 – Unadjusted quoted prices in active markets for identical assets.
- Level 2 – Inputs other than quoted prices that are observable for the asset, either directly or indirectly. These inputs include:
  a. quoted prices for similar assets in active markets;
  b. quoted prices for identical or similar assets in markets that are not active;
  c. inputs other than quoted prices that are observable for the asset; or
  d. inputs that are derived principally from or corroborated by observable market data by correlation or other means.
- Level 3 – Inputs that are unobservable for the asset. The valuation of these investments requires significant judgment due to the absence of quoted market values, inherent lack of liquidity, and changes in market conditions.

The valuation methodologies are as follows:

- U.S. Treasuries and U.S. Agencies: quoted prices for identical securities in markets that are not active;
- International Government and Corporate Obligations: broker's quote in an active market;
- Corporate Bonds: quoted prices for similar securities in active markets;
- Municipal Bonds: quoted prices for similar securities in active markets;
- Bank Loans: discounted cashflow, internal assumptions, weighting of the best available pricing inputs and third party pricing services;
- Common Stock and Equity Funds, International Preferred Stocks, International Equity Securities and Commingled Funds made up entirely of index tracking marketable securities: quoted prices for identical securities in an active market. Broker's quote in an active market;
- Money Market Funds: amortized cost which approximates fair value;
- Derivative Instruments: valued using a market approach that considers foreign exchange rates.

The recurring fair value measurements for the year ended June 30, 2020 are as follows:

	At June 30, 2020 Fair Value Measurements Using			
	Level 1	Level 2	Level 3	Totals
Investments by fair value level				
Debt Securities				
US Government, agency, and municipal obligations	$ 263,763	$ 237,439,513	$ -	$ 237,703,276
Domestic bank loans	-	214,364,449	28,611,131	242,975,580
Domestic corporate obligations	1,400,276	703,425,133	28,880,301	733,705,710
International obligations	-	279,863,625	4,319,165	284,182,790
Total debt securities	$ 1,664,039	$ 1,435,092,720	$ 61,810,597	$ 1,498,567,356
Equity Securities				
Domestic equities	$ 2,849,678,420	$ 467,928	$ 2,461,056	$ 2,852,607,404
International equities	232,538,953	-	2,773,088	235,312,041
Total equity securities	$ 3,082,217,373	$ 467,928	$ 5,234,144	$ 3,087,919,445
Other				
Commingled funds [1]	$ 9,575,456,371	$ -	$ -	$ 9,575,456,371
Total other	$ 9,575,456,371	$ -	$ -	$ 9,575,456,371
Total investments by fair value level	$ 12,659,337,783	$ 1,435,560,648	$ 67,044,740	$ 14,161,943,172
Investments measured at the Net Asset Value (NAV)				
Commingled funds [2]				$ 1,343,275,338
Real estate funds				1,960,846,320
Private equity				942,875,216
Infrastructure				279,399,854
Opportunistic debt				822,484,844
Hedge funds				46,354,758
Restricted cash (subscription advance)				40,000,000
Total investments measured at the NAV				$ 5,435,236,330
Investments not measured at fair value				
Money market instruments				$ 212,665,371
Total investments				$ 19,809,844,873

1. Commingled funds with readily determinable fair value reported as Level 1.
2. Commingled funds with limited individual investment look through priced using Net Asset Value.

Investments valued using the net asset value (NAV) per share (or its equivalent) are considered “alternative investments” and, unlike more traditional investments, generally do not have readily obtainable market values and take the form of limited partnerships. The ISBI values these investments based on the partnerships’ audited financial statements. If June 30 statements are available, those values are used preferentially. However, some partnerships have fiscal years ending at other than June 30. If June 30 valuations are not available, the value is adjusted from the most recently available valuation taking into account subsequent calls and distributions, adjusted for unrealized appreciation/depreciation, other income and fees.

The following table presents the unfunded commitments, redemption frequency (if currently eligible), and the redemption notice period for alternative investments measured at NAV:

	June 30, 2020			
	Fair Value	Unfunded Commitments*	Redemption Frequency	Redemption Notice Period
Commingled funds	$ 1,343,275,338	-	Quarterly	90 Days
Real estate funds	1,960,846,320	$ 458.0 million	Quarterly	90 Days
Private equity	942,875,216	1,015.9 million	N/A	N/A
Infrastructure	279,399,854	105.6 million	Quarterly	90 Days
Opportunistic Debt	822,484,844	875.7 million	N/A	N/A
Hedge funds	46,354,758	-	Quarterly	90 Days
Restricted cash (subscription advance)	40,000,000	-	Quarterly	90 Days
Total Investments measured at the NAV	$ 5,435,236,330			

* *In millions*

1) Commingled Funds measured at NAV – The ISBI's assets in this category consist of various investments that are blended together in order to provide economies of scale, allowing for lower trading costs per dollar of investment and diversification. These investments provide primarily liquid exposure to publicly traded equity and fixed income markets. The equity and fixed income portfolios provide diversification benefits and return enhancement to the overall fund in both domestic and international markets. Commingled funds are also called "pooled funds" and "master trusts". The ISBI's current NAV measured Commingled fund exposure consists of investments in twenty-five domestic and international public equity (twenty-four) and fixed income (one) funds. Eight of these funds are domestic and seventeen are international. The fair value of these investments is based on audited financial statements of the funds adjusted for activity from the audit date to year end. The ISBI has no plans to liquidate these investments as of June 30, 2020. It is not probable that any investment will be sold at an amount different from the NAV of the plan's ownership interest.

2) Private Equity Funds – The ISBI's assets in this category consist of investments in funds not listed on public exchanges. The ISBI's current Private Equity exposure consists of investments in seventy-four funds with the goals of generating returns significantly greater than typically available in the public market and diversifying the ISBI's overall portfolio that is comprised predominantly of equity and fixed income assets. The strategies of Private Equity funds include, but are not limited to, leveraged buyouts, venture capital and growth capital. Returns are commensurate with the risks presented by this asset class which include illiquidity. The fair value of these investments is based on audited financial statements of the funds adjusted for activity from the audit date to year end. The ISBI has no plans to liquidate these investments as of June 30, 2020. It is not probable that any investment will be sold at an amount different from the NAV of the plan's ownership interest.

3) Hedge Funds – The ISBI's assets in this category have historically consisted of investments in funds that seek to generate better than average return and provide a hedge against a downward trend in the overall market. The ISBI is currently in the process of transitioning investments in hedge fund vehicles to long-only equity vehicles. The ISBI's current Hedge Fund exposure consists of investments in six funds including hedge fund and long only equity assets. Returns are commensurate with the risks presented by this asset class which include illiquidity. The fair value of these investments is based on audited financial statements of the funds adjusted for activity from the audit date to year end. It is not probable that any investment will be sold at an amount different from the NAV of the plan's ownership interest.

4) Infrastructure Funds – The ISBI's assets in this category consist of investments in funds that target infrastructure assets that provide essential services or facilities to a community (ports, bridges, toll roads, etc.). The ISBI's current infrastructure exposure consists of investments in nine funds that seek to diversify the ISBI's overall portfolio (comprised predominantly of equity and fixed income assets) and provide capital appreciation and income generation. The fair value of these investments is based on audited financial statements of the funds adjusted for activity from the audit date to year-end. The ISBI has no plans to liquidate these investments as of June 30, 2020. It is not probable that any investment will be sold at an amount different from the NAV of the plan's ownership interest.

5) Opportunistic Debt Funds – The ISBI's assets in this category consist of investments in private fixed income markets. The ISBI's current Opportunistic Debt exposure consists of investments in forty-two funds with the goals of diversifying the ISBI's overall portfolio, providing downside protection through assets that are capital collateralized, and supplementing the total return of the portfolio which is comprised predominantly of equity and fixed income assets. The fair value of these investments is based on audited financial statements of the funds adjusted for activity from the audit date to year-end. The ISBI has no plans to liquidate these investments as of June 30, 2020. It is not probable that any investment will be sold at an amount different from the NAV of the plan's ownership interest.

6) Real Estate Funds – The ISBI's assets in this category consist of investments in Core and Non-Core Real Estate Fund categories. The ISBI's current Real Estate exposure consists of investments in forty-eight funds with the goals of diversifying the ISBI's overall portfolio, providing capital appreciation and supplementing the total return of the portfolio through exposure to private real estate assets in both open-end and closed-end structures. Investments in this category are globally diversified and consist of office, industrial, multi-family, retail, storage and other types of assets. Core assets are expected to provide strong diversification through primary markets and high-income potential. Non-Core assets are typically higher risk assets with stronger capital appreciation. The fair value of these investments is based on audited financial statements of the funds adjusted for activity from the audit date to year-end. The ISBI has no plans to liquidate these investments as of June 30, 2020. It is not probable that any investment will be sold at an amount different from the NAV of the plan's ownership interest.

7) Restricted Cash (Subscription Advance) – The ISBI's assets in this category consist of cash contributed to alternative investment managers prior to June 30 that is being held for a pending new investment subscription on July 1. The ISBI's current exposure consists of one subscription advance in Durable Capital Onshore Fund LP (a domestic equity commingled fund). Restricted cash held at period end rolled into the designated investment vehicle to be tracked as a traditional commingled investment effective July 1, 2020.

Custodial Credit Risk for Investments

The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, the ISBI will not be able to recover the value of investments or collateral securities that are in the possession of a counterparty. As of June 30, 2020, there were no investments that were uninsured and unregistered securities held by the counterparty or by its trust department or agent but not in the ISBI's name.

Interest Rate Risk

The ISBI manages its exposure to fair value losses arising from interest rate risk by diversifying the debt securities portfolio and maintaining the debt securities portfolio to an effective weighted duration consistent with the Barclay's U.S. Universal Index (benchmark index). As of June 30, 2020, the effective weighted duration of the ISBI's fixed income portfolio was 4.6 years and the effective duration of the benchmark index was 6.3 years.

Duration is the measure of a debt investment's exposure to fair value changes arising from changing interest rates. It uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's fair value. The effective duration measures the sensitivity of market price to parallel shifts in the yield curve. The table below shows the detail of the duration by investment type as of June 30, 2020:

Investment Type	Fair Value	Effective Weighted Duration Years
U.S. government, agency, and municipal obligations		
U.S. Government	$ 64,308,682	2.4
U.S. federal agency	171,718,409	0.3
U.S. municipal bonds	1,676,185	-
Total U.S. government, agency, and municipal obligations	237,703,276	
Domestic obligations		
Banks	290,392,146	5.5
Media	79,104,790	6.6
Insurance	39,671,215	7.4
Other	324,537,559	4.6
Total domestic obligations	733,705,710	
International obligations	284,182,790	6.0
Grand Total	$1,255,591,776	

For the ISBI's bank loan portfolio, the appropriate measure of interest rate risk is weighted average maturity. Weighted average maturity is the average time it takes for securities in a portfolio to measure weighted in proportion to the dollar amount that is invested in the portfolio. Weighted average maturity measures the sensitivity of fixed-income portfolios to interest rate changes. At June 30, 2020, the weighted average maturity of ISBI's bank loan portfolio was 4.8 years.

Concentration of Credit Risk and Credit Risk for Investments

The ISBI's portfolio of investments is managed by professional investment management firms. These investment management firms are required to maintain diversified portfolios. Each investment manager must comply with risk management guidelines individually assigned to them as part of their investment management agreement. The ISBI did not have any issuer investment that exceeded 5% of the total investments of the fund as of June 30, 2020. The table on the next page, presents the quality ratings of debt securities held by the ISBI as of June 30, 2020.

	Moody's Quality Rating	
U.S. Government and Agency Obligations		
	AAA	$ 235,558,975
	B	468,116
Total U.S. Government and Agency Obligations		$ 236,027,091
U.S. municipal bonds		
	BA	$ 67,125
	BAA	254,081
	CA	420,410
	Not rated	934,569
Total U.S. municipal bonds		$ 1,676,185
Domestic corporate obligations		
Banks	A	$ 263,165,926
	B	3,841,550
	Not Rated	23,384,670
Total banks		$ 290,392,146
Media	A	$ 61,329,076
	BA	966,206
	B	11,026,775
	CAA	3,758,053
	Not rated	2,024,680
Total media		$ 79,104,790
Insurance	A	$ 30,105,880
	BA	2,475,789
	CAA	7,089,846
Total insurance		$ 39,671,215
Other	AAA	$ 1,080,998
	AA	7,006,652
	A	70,987,895
	BAA	10,448,214
	BA	51,021,037
	B	40,600,349
	CAA	43,976,776
	CA	1,265,753
	C	56,000
	Not rated	$ 98,093,885
Total other		324,537,559
Total domestic corporate obligations		$ 733,705,710

	Moody's Quality Rating	
Domestic bank loans		
	BA	$ 1,789,700
	B	95,081,167
	CAA	45,530,738
	CA	2,289,692
	Not rated	98,284,283
Total bank loans		$ 242,975,580
International obligations		
	AAA	$ 3,082,474
	AA	5,423,058
	A	21,731,231
	BAA	62,302,697
	BA	57,305,098
	B	44,795,256
	CAA	21,854,110
	CA	3,280,616
	C	79,638
	Not rated	64,328,612
Total international obligations		$ 284,182,790
Money market instruments		
	Not rated	$ 212,665,371
Total money market instruments		$ 212,665,371

Foreign Currency Risk

The ISBI's international portfolio is constructed on the principles of diversification, quality, growth, and value. Risk of loss arises from changes in currency exchange rates and other factors. Certain investments held in infrastructure, opportunistic debt, private equity and real estate funds trade in a reported currency of Euro-based dollars valued at $164,136,390 as of June 30, 2020. The table below presents the foreign currency risk by type of investment as of June 30, 2020.

Currency	Foreign Equities	Foreign Obligations
Argentine Peso	$ -	$ 36,904
Australian Dollar	3,895,539	-
Brazilian Real	955,409	671,712
British Pound Sterling	20,842,921	-
Canadian Dollar	6,561,841	-
Danish Krone	2,033,859	-
Euro Currency	82,570,654	5,341,098
Hong Kong Dollar	14,060,309	-
Indonesian Rupiah	-	538,388
Japanese Yen	43,605,460	-
Kazakhstan Tenge	-	333,620
Mexican Peso	1,605,317	318,626
New Israeli Shekel	175,509	-
New Taiwan Dollar	1,279,127	-
New Zealand Dollar	327,853	-
Norwegian Krone	333,257	-
Peruvian Nuevo Sol	-	1,902,832
Russian Ruble	-	835,809
Singapore Dollar	970,531	-
South African Rand	473,094	543,017
South Korean Won	9,522,094	-
Swedish Krona	1,879,068	-
Swiss Franc	22,544,505	-
Thailand Baht	1,783,087	-
United Arab Emirates Dirham	239,619	-
Ukrainian Hryvnia	-	361,784
Uruguayan Peso Uruguayo	-	790,054
Foreign investments denominated in U.S. Dollars	19,652,997	272,508,946
Total	$ 235,312,041	$ 284,182,790

Securities Lending

Cash and cash equivalents included in the System's Statement of Fiduciary Net Position consist of deposits held in the State Treasury. The Illinois Office of the Treasurer invests the deposits held and allocates investment income on a monthly basis.

The State Treasurer lends securities to broker-dealers and other entities for collateral that will be returned for the same securities in the future. The State Treasurer has, through a Securities Lending Agreement, authorized Deutsche Bank AG to lend the State Treasurer's securities to broker-dealers and banks pursuant to a form of loan agreement.

During fiscal year 2020, Deutsche Bank AG lent U.S. Agency securities and U.S. Treasury securities and received as collateral U.S. dollar denominated cash. Borrowers were required to deliver collateral for each loan equal to at least 100% of the aggregate fair value of the loaned securities. Loans are marked to market daily. If the fair value of collateral falls below 100%, the borrower must provide additional collateral to raise the fair value to 100%.

The State Treasurer did not impose any restrictions during fiscal year 2020 on the amount of the loans of available, eligible securities. In the event of borrower default, Deutsche Bank AG provides the State Treasurer with counterparty default indemnification. In addition, Deutsche Bank AG is obligated to indemnify the State Treasurer if Deutsche Bank AG loses any securities, collateral or investments of the State Treasurer in Deutsche Bank AG's custody. There were no losses during fiscal year 2020 resulting from a default of the borrowers or Deutsche Bank AG.

During fiscal year 2020, the State Treasurer and the borrowers maintained the right to terminate all securities lending transactions on demand. The cash collateral received on each loan was invested in repurchase agreements with approved counterparties collateralized with securities approved by Deutsche Bank AG and marked to market daily at no less than 102%. Because the loans are terminable at will, their duration did not generally match the duration of the investments made with cash collateral. The State Treasurer had no credit risk as a result of its securities lending program as the collateral held exceeded the fair value of the securities lent. The securities lending collateral received that was invested in repurchase agreements and the fair value of securities on loan for the State Treasurer as of June 30, 2020 were $4,344,267,500 and $4,290,619,359, respectively. The System's portion of securities lending collateral that was invested in repurchase agreements as of June 30, 2020 was $54,881,000.

Derivative Securities

In fiscal year 2010, the ISBI implemented GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments,* with respect to investments held in derivative securities. A derivative security is an investment whose payoff depends upon the value of other assets such as commodity prices, bond and stock prices, or a market index. The ISBI invests in derivative instruments including futures, options, rights and warrants, and swaps. The ISBI's derivatives are considered investment derivatives.

The ISBI's investment managers use financial futures to replicate an underlying security they wish to hold (sell) in the portfolio. In certain instances, it may be beneficial to own a futures contract rather than the underlying security. Additionally, financial futures are used in the ISBI's fixed income portfolio to adjust portfolio strategy and overall portfolio duration. A financial futures contract is an agreement to buy or sell a specific amount at a specified delivery or maturity date for an agreed-upon price. If the fair values of the futures contract vary from the original contract price, a gain or loss is recognized and paid to or received from the clearinghouse. The gain or loss is recognized in the net increase/decrease in the fair value of investments in the ISBI's Statement of Changes in Net Position. Financial futures represent an off-balance sheet obligation, as there are no balance sheet assets or liabilities associated with those contracts. The cash or securities to meet these obligations are held in the ISBI's investment portfolio.

The ISBI's investment managers use options in an attempt to add value to the portfolio (collect premiums) or protect (hedge) a position in the portfolio. Financial options are an agreement that gives one party the right, but not the obligation, to buy or sell a specific amount of an asset for a specified price, called the strike price, on or before a specified expiration date. As a writer of financial options, the ISBI receives a premium at the outset of the agreement and bears the risk of an unfavorable change in the price of the financial instrument underlying the option. All written financial options are recognized as a liability in the ISBI's Statement of Net Position. As a purchaser of financial options, the ISBI pays a premium at the outset of the agreement and the counterparty bears the risk of an unfavorable change in the price of the financial instrument underlying the option. The gain or loss associated with options is recognized in the net increase/decrease in the fair value of investments in the ISBI's Statement of Changes in Net Position.

Rights and warrants allow the ISBI investment managers to replicate an underlying security they wish to hold (sell) in the portfolio. Rights and warrants provide the holder with the right, but not the obligation, to buy or sell a company's stock at a predetermined price. Rights usually expire after a few weeks and warrants can expire from one to several years. These investments are reported at fair value in the investment section of the Statement of Net Position within the common stock and foreign equity classifications. The gain or loss associated with rights and warrants is recognized in the net increase/decrease in the fair value of investments in the ISBI Statement of Changes in Net Position.

The ISBI investment managers use swaps to periodically exchange cash flows or liabilities with a defined counterparty, primarily as a method to hedge against specific risk exposures (e.g., interest rate risk, currency risk). Principal is usually not exchanged between the counterparties as part of these agreements. The fair values of the swap contracts represent current outstanding settlement receivables (assets) or payables (liabilities). These investments are reported at fair value in either the Investments Purchased or Investments Sold lines depending on their period end position as an outstanding receivable or payable. Gains or losses are recognized in the net increase/decrease in the fair value of investments in the ISBI Statement of Change in Net Position

The table below presents the investment derivative instruments aggregated by type that were held by the ISBI as of June 30, 2020.

	Changes in Fair Value	Fair Value at Year End	Notional Amount Number of Shares
Fixed Income Futures	$ -	$ -	23
Options	(111,808)	(111,808)	(8,670,000)
Rights/Warrants	24,995	26,421	580,428
Swaps	2,131,396	506,818	17,824,917
	$ 2,044,583	$ 421,431	9,735,368

Derivative transactions involve, to varying degrees, credit risk and market risk. Credit risk is the possibility that a loss may occur because a party to a transaction fails to perform according to terms. Derivatives which are exchange traded are not subject to credit risk. No derivatives held are subject to custodial credit risk. Market risk is the possibility that a change in interest (interest rate risk) or currency rates (foreign currency risk) will cause the value of a financial instrument to decrease or become more costly to settle. The market risk associated with derivatives, the prices of which are constantly fluctuating, is regulated by imposing strict limits as to the types, amounts and degree of risk that investment managers may undertake. These limits are approved by the Board of Trustees and management of the ISBI and the risk positions of the investment managers are reviewed on a periodic basis to monitor compliance with the limits.

5. Funding - Statutory Contributions Required & Contributions Made

On an annual basis, a valuation of the liabilities and reserves of the System is performed by the System's actuarial consultants in order to determine the amount of contributions statutorily required from the State of Illinois. For fiscal year 2020, the actuary used the projected unit credit actuarial method for determining the proper employer contribution rate and amount.

For fiscal year 2020, the required employer contributions were computed in accordance with the State's funding plan. This funding legislation provides for a systematic 50 year funding plan with an ultimate goal to fund the cost of maintaining and administering the System at an actuarial funded ratio of 90%.

In addition, the funding plan provided for a 15 year phase-in period to allow the state to adapt to the increased financial commitment. Since the 15 year phase-in period ended June 30, 2010, the state's contribution will remain at a level percentage of payroll for the next 35 years until the 90% funded level is achieved.

The employer contributions associated with the payrolls from the general revenue fund are paid in equal installments each month to the System based on the projected payroll for the year. At the end of the fiscal year, a reconciliation is performed with the State Comptroller's Office to calculate the actual general revenue wages subject to retirement and actual employer contributions due the System from the general revenue fund. If this calculation is greater than the general revenue employer contributions paid, an employer contribution receivable is accrued. If this calculation is less than the general revenue employer contributions paid, a Due to the State of Illinois (General Revenue Fund) is accrued. For fiscal year 2020, a receivable from the State of Illinois was accrued in the amount of $78,731,676.58 for the general revenue fund underpayment.

The total amount of statutorily required employer contributions, net of the debt service contributions, for fiscal year 2020 was $2,359,202,932. The total amount of employer contributions received from the State and other sources during fiscal year 2020 was $2,368,905,396.

6. Net Pension Liability of the State

The components of the State's net pension liability for this plan at June 30, 2020 are as follows:

The System is significantly underfunded which raises concerns about its future financial solvency should there be a significant market downturn coupled with the State's inability or unwillingness to pay the employer contributions.

Total Pension Liability (TPL)	Plan Fiduciary Net Position (FNP)	Net Pension Liability	Plan FNP as % of TPL
$54,065,950,445	$19,197,272,352	$34,868,678,093	35.51%

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of June 30, 2020, using the following actuarial assumptions, which were based on the results of an actuarial experience study for the period from July 1, 2015 to June 30, 2018, applied to all periods included in the measurement. The history of key assumption changes include changes to the investment returns, rate of inflation, mortality and others as detailed in the Required Supplementary Information of this CAFR.

Additionally, assumptions pertaining to the accelerated pension benefit (Total Buyout Program and COLA Buyout Program) were built into the model. These programs (Public Act 100-0587) allow certain members eligible for a pension to elect an accelerated present value payment based on a percentage of future benefits payable in exchange for giving up those future benefits. The accelerated payment is financed through the sale of bonds.

The June 30, 2020 actuarial valuation used the following actuarial assumptions:

Actuarial Cost Method:	Entry Age Normal
Mortality:	Pub-2010 General and Public Safety Healthy Retiree mortality tables, sex distinct, with rates projected to 2018 generational mortality improvement factors were updated to projection scale MP-2018.
Inflation:	2.25%
Investment rate of return:	6.75%
Salary increases:	Salary increase rates based on age-related productivity and merit rates plus inflation.
Post-retirement increase:	Post-retirement benefit increases of 3.00%, compounded, for Tier 1 and 3.00% or one-half of the annual increase in the Consumer Price Index, whichever is less, simple, for Tier 2.
Retirement age:	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the June 30, 2019, valuation pursuant to an experience study of the period July 1, 2015 to June 30, 2018.

Long-term Expected Return on Plan Assets

The long-term expected rate of return on pension plan investments is reviewed annually by the System's actuary, Gabriel Roeder Smith and Company (GRS), as part of the economic assumptions review. The actuarial assumptions are developed using historical data and projections employed to model future returns as provided by the Illinois State Board of Investments (ISBI) in conjunction with its investment consultant. The assumed rate of inflation which must be combined with the projected real return is 2.25%.

The target allocations and forward looking annualized geometric real rates of return for each major asset class, which are applicable for a 20-year projection period, are summarized in the following table. The 20-year projections produced an estimated annual real return of 5.26% and a standard deviation of 12.0% for the aggregate portfolio.

	Asset Allocation	
Asset Class	Target Allocation	20 Year Simulated Real Rate of Return
U.S. Equity	23%	5.5%
Developed Foreign Equity	13%	5.9%
Emerging Market Equity	8%	7.8%
Private Equity	7%	7.5%
Intermediate Investment Grade Bonds	14%	1.1%
Long-term Government Bonds	4%	1.1%
TIPS	4%	1.0%
High Yield and Bank Loans	5%	3.7%
Opportunistic Debt	8%	4.7%
Emerging Market Debt	2%	2.7%
Real Estate	10%	3.2%
Infrastructure	2%	3.9%
Total	100%	

Discount Rate

A single discount rate of 6.35% was used to measure the total pension liability as of June 30, 2020. This represents a decrease of 0.12% from the discount rate used for the June 30, 2019 valuation, 6.47%.

The single discount rate was based on the June 30, 2020 expected rate of return on pension plan investments of 6.75%, and a municipal bond rate of 2.45% as of June 30, 2020. The projection of cash flows used to determine the single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between the statutory contributions and the member rate. Based on these assumptions, the pension plan's fiduciary net position and future contributions were sufficient to finance the benefit payments through the year 2075 at June 30, 2020. As a result, for fiscal year 2020, the long-term expected rate of return on pension plan investments was applied to projected benefit payments through 2075, and the municipal bond rate was applied to all benefit payments after that date.

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

For fiscal year 2020, the following table presents the plan's net pension liability using a single discount rate of 6.35%, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage point lower or 1-percentage point higher.

	June 30, 2020		
	1% decrease 5.35%	Current Discount Rate 6.35%	1% increase 7.35%
State's net pension liability	$42,149,807,357	$34,868,678,093	$28,883,921,896

7. Compensated Absences

Employees of the System are entitled to receive compensation for all accrued but unused vacation time upon termination of employment. Additionally, employees of the System are entitled to receive compensation for one-half of the unused sick days that were earned on and after January 1, 1984 and before January 1, 1998, upon termination of employment. The accrued compensated absences, which is included in Administrative Expenses Payable, is shown on the following table:

	Beginning Balance	Current Year Additions	Current Year Deletions	Ending Balance
Accrued Compensated Absences	$ 764,004	$ 898,692	$ 757,899	$ 904,797

8. Collection and Remittance of Bond and Interest Payments

On April 7, 2003, House Bill 2660 was signed into law as Public Act 93-0002. This legislation authorized the State to issue $10 billion in general obligation bonds for the purpose of making required contributions to the five state-funded retirement systems, including the State Employees' Retirement System. On July 1, 2003, the net bond proceeds were allocated and distributed to each of the five state-funded retirement systems based on each system's relative percentage of the total unfunded liability at June 30, 2002. The State Employees' Retirement System received an allocation of bond proceeds totaling $1,385,895,278 and deposited all of the proceeds into the Illinois State Board of Investment Commingled Fund on July 2, 2003.

Public Act 93-0839, effective July 30, 2004, requires that employer contributions to the System shall include an additional amount to be paid over to the General Obligation Bond Retirement and Interest Fund to pay principal of and interest on those general obligation bonds due that fiscal year. This debt service payment is to be made on the first day of each month, or as soon thereafter as practical.

The total debt service payments received for all fiscal year 2020 payrolls amounted to $32.5 million. The total amount remitted to the State of Illinois as of June 30, 2020 was $28.0 million.

As of June 30, 2020, the following amounts are included in the System's Statement of Plan Net Position regarding the collection of bond principal and interest payments:

Cash - payments collected but not yet remitted to the State of Illinois	$ (3,081,019)
Accounts receivable - for June payrolls received in July & August	$ (1,432,437)
Due to the State of Illinois	$ (4,513,456)

9. Administrative Expenses & Other Post-Employment Benefits

Expenses related to the administration of the System are financed through investment earnings and employer retirement contributions. These expenses which are budgeted and approved by the System's Board of Trustees, are displayed in the table below for June 30, 2020.

Personal Services	$ 5,533,899
Employee Retirement Pickup	37,071
Retirement Contributions	3,008,048
Social Security Contributions	413,415
Group Insurance	1,232,587
Contractual Services	1,870,494
Travel	7,140
Commodities	17,113
Printing	27,766
Equipment	52,827
Electronic Data Processing	3,915,840
Telecommunications	39,744
Automotive	7,747
Depreciation/Amortization	984,767
Other (net)	264,104
Total	$ 17,412,562

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. Substantially all State employees become eligible for post-employment benefits if they eventually become annuitants of one of the State sponsored pension plans.

Health, dental, and vision benefits include basic benefits for annuitants and dependents under the State's self-insurance plan and insurance contracts currently in force. Annuitants may be required to contribute towards health, dental, and vision benefits with the amount based on factors such as date of retirement, years of credited service with the State, whether the annuitant is covered by Medicare, and whether the annuitant has chosen a managed health care plan. Annuitants who retired prior to January 1, 1998, and who are vested in the State Employees' Retirement System do not contribute towards health, dental, and vision benefits. For annuitants who retired on or after January 1, 1998, the annuitant's contribution amount is reduced five percent for each year of credited service with the State allowing those annuitants with twenty or more years of credited service to not have to contribute towards health, dental, and vision benefits. Annuitants also receive life insurance coverage equal to the annual salary of the last day of employment until age 60, at which time the benefit becomes $5,000.

The State pays the System's portion of employer costs for the benefits provided. The total cost of the State's portion of health, dental, vision, and life insurance benefits of all members, including post-employment health, dental, vision, and life insurance benefits, is recognized as an expenditure by the State in the Illinois Comprehensive Annual Financial Report. The State finances the costs on a pay-as-you-go basis. The total costs incurred for health, dental, vision, and life insurance benefits are separated by individual department or fund for annuitants and their dependents and active employees and their dependents after the State adopted GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions. The System and the State Comptroller has determined that it would be inappropriate for the System to record its allocated share of the State's other post-employment benefits (OPEB) expense and liability associated with its employees because accounting standards would require that those costs be reallocated and recovered from other state agencies and funds through employer pension contributions.

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

10. Social Security Division - Administrative Expenses

The Social Security Division of the State Employees' Retirement System was created by 40 ILCS 5/21, to administer the state's responsibilities under Title II Section 218 of the Federal Social Security Act and the master federal-state agreement.

The state's responsibilities include extending Social Security coverage by agreement to any of the state's retirement systems or units of local government requesting social security or medicare only coverage for their members or employees.

In addition, the Social Security Division was responsible for collecting wage information and contribution payments from covered retirement systems and units of local government on wages paid prior to January 1, 1987. Administrative expenses for the Social Security Division are appropriated annually by the State Legislature and are as follows for fiscal year 2020:

Personal services	$ 72,726
Social Security contributions	5,303
Contractual services	20,278
Telecom	214
Total	$ 98,521

11. Capital Assets

Capital assets over $1,000 are capitalized at their cost at the time of acquisition. Depreciation is computed using the straight-line method over the estimated useful life of the asset. The estimated useful lives are as follows: (1) office furniture - 10 years, (2) equipment - 6 years, (3) automobiles and certain electronic data processing equipment - 3 years, (4) building - 30 years, (5) land improvements - 15 years, and (6) capitalized software - 20 years. Land is carried at its original cost, including applicable legal fees, surveying costs, etc. This is a summary of changes in capital assets for 2020:

	Beginning Balance	Additions	Deletions	Ending Balance
Assets				
Land	$ 655,241	$ –	$ –	$ 655,241
Land improvements	315,779	–	–	315,779
Building	4,478,519	–	–	4,478,519
Equipment	2,556,165	94,200	(16,467)	2,633,898
Capitalized software costs	9,742,783	2,272,418	–	12,015,201
TOTAL	17,748,487	2,366,618	(16,467)	20,098,638
Accumulated depreciation/amortization				
Land improvements	(20,479)	(2,838)	–	(23,317)
Building	(3,367,781)	(175,446)	–	(3,543,227)
Equipment	(2,120,153)	(206,301)	5,946	(2,320,508)
Capitalized software costs	(1,529,680)	(600,760)	–	(2,130,440)
TOTAL	(7,038,093)	(985,345)	5,946	(8,017,492)
Net capital assets	$ 10,710,394	$ 1,381,273	$ (10,521)	$ 12,081,146

SCHEDULE OF CHANGES IN THE STATE'S NET PENSION LIABILITY AND RELATED RATIOS
Fiscal Years Ended June 30, 2020 through 2014

	2020	2019
Total pension liability		
Service cost	$ 818,759,630	$ 801,415,244
Interest	3,295,058,848	3,378,803,879
Change of Benefit Terms (1)	-	(462,609,552)
Difference between expected and actual experience	114,763,238	(24,683,325)
Assumption changes	716,029,264	313,744,264
Benefit payments	(2,727,820,833)	(2,601,306,593)
Refunds	(19,366,029)	(24,133,508)
Administrative expense	(17,412,562)	(14,978,852)
Net change in total pension liability	2,180,011,556	1,366,251,557
Total pension liability - beginning	51,885,938,889	50,519,687,332
Total pension liability - ending (a)	$ 54,065,950,445	$ 51,885,938,889
Plan fiduciary net position		
Contributions - employer	$ 2,368,905,396	$ 2,274,925,279
Contributions - participant	271,749,009	275,675,175
Net investment income	829,328,719	1,118,428,910
Benefit payments	(2,727,820,833)	(2,601,306,593)
Refunds	(19,366,029)	(24,133,508)
Administrative expense	(17,412,562)	(14,978,852)
Net change in plan fiduciary net position	705,383,700	1,028,610,411
Plan fiduciary net position - beginning	18,491,888,652	17,463,278,241
Plan fiduciary net position - ending (b)	$ 19,197,272,352	$ 18,491,888,652
State's net pension liability - ending (a)-(b)	$ 34,868,678,093	$ 33,394,050,237
Plan fiduciary net position as a percentage of the total pension liability	35.51%	35.64%
Covered payroll	$ 4,517,748,809	$ 4,621,647,466
State's net pension liability as a percentage of covered payroll	771.82%	722.56%
Single discount rate, Beginning of Year	6.47%	6.81%
Single discount rate, End of Year	6.35%	6.47%
Long-term municipal bond rate	2.45%	3.13%
Long-term municipal bond rate date	06/30/20	06/30/19

2018	2017	2016	2015	2014
$ 828,485,950	$ 893,147,418	$ 843,376,643	$ 847,997,030	$ 776,487,959
3,295,855,347	3,217,531,841	2,989,387,125	2,912,736,360	2,754,121,665
-	-	-	-	-
(185,488,891)	(601,530,567)	(730,622,389)	(464,942,210)	150,997,067
(348,811,194)	(884,705,099)	5,048,087,579	360,713,498	3,142,466,514
(2,464,832,022)	(2,328,620,783)	(2,190,501,203)	(2,034,858,435)	(1,917,062,639)
(27,469,348)	(26,608,011)	(26,708,730)	(23,128,975)	(23,082,814)
(15,257,526)	(15,957,439)	(16,126,997)	(16,547,823)	(16,615,105)
1,082,482,316	253,257,360	5,916,892,028	1,581,969,445	4,867,312,648
49,437,205,016	49,183,947,656	43,267,055,628	41,685,086,183	36,817,773,535
$ 50,519,687,332	$ 49,437,205,016	$ 49,183,947,656	$43,267,055,628	$41,685,086,183
$ 1,929,175,044	$ 1,798,348,440	$ 1,882,243,268	$ 1,804,319,356	$ 1,699,447,826
254,442,466	251,610,974	256,198,172	266,139,156	269,232,241
1,257,039,835	1,812,878,460	(125,442,931)	681,377,052	2,169,346,258
(2,464,832,022)	(2,328,620,783)	(2,190,501,203)	(2,034,858,435)	(1,917,062,639)
(27,469,348)	(26,608,011)	(26,708,730)	(23,128,975)	(23,082,814)
(15,257,526)	(15,957,439)	(16,126,997)	(16,547,823)	(16,615,105)
933,098,449	1,491,651,641	(220,338,421)	677,300,331	2,181,265,767
16,530,179,792	15,038,528,151	15,258,866,572	14,581,566,241	12,400,300,474
$ 17,463,278,241	$ 16,530,179,792	$ 15,038,528,151	$15,258,866,572	$14,581,566,241
$ 33,056,409,091	$ 32,907,025,224	$ 34,145,419,506	$28,008,189,056	$27,103,519,942
34.57%	33.44%	30.58%	35.27%	34.98%
$ 4,240,108,939	$ 4,192,582,495	$ 4,282,020,350	$ 4,452,369,221	$ 4,414,784,230
779.61%	784.89%	797.41%	629.06%	613.93%
6.78%	6.64%	7.02%	7.09%	7.60%
6.81%	6.78%	6.64%	7.02%	7.09%
3.62%	3.56%	2.85%	3.80%	4.29%
06/30/18	06/30/17	06/30/16	06/30/15	06/30/14

Notes to the Schedule of Changes in the State's Net Pension Liability and Related Ratios

Valuation Date: June 30, 2020

This Schedule is intended to show information for ten (10) years. Information prior to 2014 is not available. The additional years will be added, prospectively, as they become available.

(1) "Change of Benefit Terms" relates to the Buyout Program that was extended by Public Act 101-0010.

Key Assumption Changes Related to the Schedule of Changes in the State's Net Pension Liability and Related Ratios

2020 Changes in Assumptions:

- There were no significant assumption changes.

2019 Changes in Assumptions:

- The rate of inflation decreased from 2.5% to 2.25%.
- The investment return assumption was reduced from 7.00% to 6.75%.
- The payroll growth assumption was decreased from 3.00% to 2.75%.
- The salary increase assumption was decreased from 3.00% to 2.75%.
- Mortality improvement factors were update to the projection scale MP-2018.
- Mortality tables were updated to
  - Post Retirement: Pub-2010 General Healthy Retiree for Regular Formula members and Pub-2010 Public Safety Health Retiree for Alternative Formula members.
  - Pre-Retirement: Pub-2010 General Employee for Regular Formula members and Pub-2010 Public Safety Employee for Alternative Formula members.
- Scaling factors were applied to partially reflect observed mortality experience to the extent it is credible.
- Normal retirement rates were increased to better reflect observed experience.
- Early retirement rates were decreased to better reflect observed experience.
- Turnover rates were increased to better reflect observed experience.
- The load for inactive members eligible for deferred vested pension benefits was changed to 11% for Regular Formula members and 9% for Alternative Formula members.
- The assumed election for accelerated benefit payments under the COLA buyout was set at 21% of eligible Regular Formula members and 28% of eligible Alternative Formula members.
- The assumed election for accelerated benefit payments under the Total buyout was set at 5% of eligible inactive members.

2018 Changes in Assumptions:

- The rate of inflation decreased from 2.75% to 2.50%.
- The salary increase assumption was decreased from 3.25% to 3.00%.

2017 Changes in Assumptions:

- There were no significant assumption changes.

2016 Changes in Assumptions:

- The rate of inflation decreased from 3.00% to 2.75%.
- The investment return assumption was decreased from 7.25% to 7.00%.
- The salary increase assumption was decreased from 3.5% to 3.25%.
- Separate Tier 2 turnover rates were implemented for members eligible for regular formula and alternative formula benefits. The new rates increased the expected turnover.
- Generational mortality improvement factors were added to reflect future mortality improvements. The new mortality tables move from a single dimensional age-based table to a two dimensional table where the year of a person's birth influences their mortality rate.
- An assumption was added that all current and future active members would increase service by 4.5 months upon retirement due to the optional service purchase of unused sick and vacation leave upon leaving state employment.

2015 Changes in Assumptions:

- There were no significant assumption changes.

SCHEDULE OF INVESTMENT RETURNS

	2020	2019	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expense	4.7%	7.1%	7.6%	12.4%	(0.9)%	4.8%	17.9%

* **NOTE:** This Schedule is intended to show information for ten (10) years. Information prior to 2014 is not available. The additional years will be added, prospectively, as they become available.

SCHEDULE OF STATE CONTRIBUTIONS

Fiscal Year Ended June 30	Actuarially determined contribution	Contributions received	Contribution (deficiency) excess	Covered Payroll	Contributions received as a percentage of covered payroll
2011	$ 1,289,002,005	$ 1,127,886,796	$ (161,115,209)	$ 4,211,186,269	26.78%
2012	1,614,834,808	1,391,416,375	(223,418,433)	4,328,767,884	32.14%
2013	1,741,286,416	1,531,932,137	(209,354,279)	4,235,366,263	36.17%
2014	1,956,841,419	1,699,447,826	(257,393,593)	4,414,784,230	38.49%
2015	2,045,354,223	1,804,319,356	(241,034,867)	4,452,369,221	40.52%
2016	2,019,691,233	1,882,243,268	(137,447,965)	4,282,020,350	43.96%
2017	2,129,482,987	1,798,348,440	(331,134,547)	4,192,582,495	42.89%
2018	2,739,377,709	1,929,175,044	(810,202,665)	4,240,108,939	45.50%
2019	2,995,968,149	2,274,925,279	(721,042,870)	4,621,647,466	49.22%
2020	2,913,649,550	2,368,905,396	(544,744,154)	4,517,748,809	52.44%

Notes to Schedule of State Contributions:

Note: ADC for fiscal years 2019 forward reflect the buyout program provisions provided in Public Act 100-0587.

Valuation Date: June 30, 2018

Notes: Actuarially determined contribution rates are calculated as of June 30, which is 12 months prior to the beginning of the fiscal year in which the contributions will be made.

Covered payroll for fiscal years on and after June 30, 2012, were restated to comply with the requirements of GASB Statement No. 82. For fiscal years prior to June 30, 2012, covered payroll was not restated to comply with the requirements of GASB Statement No. 82 due to system limitations.

Methods and Assumptions as of the Valuation Date:

Actuarial Cost Method: Projected Unit Credit

Amortization Method: Normal cost plus a level percentage of capped payroll amortization of the unfunded accrued liability.

Remaining Amortization Period: 22 years, closed

Asset Valuation Method: 5 year smoothed market

Inflation: 2.5%

Salary Increases: Salary increase rates based on age-related productivity and merit rates plus inflation.

Post Retirement Benefits: Post-retirement benefit increases of 3.00%, compounded, for Tier 1 and 3.00% or one-half of the annual increase in the Consumer Price Index whichever is less, simple, for Tier 2.

Investment Rate of Return: 7.00%

Retirement Age: Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the June 30, 2014, valuation pursuant to an experience study of the period July 1, 2009 to June 30, 2013.

Mortality: 105% of the RP2014 Healthy Annuitant table, sex distinct with generational mortality improvements.

SUMMARY OF REVENUES BY SOURCE

For the Year Ended June 30, 2020

Contributions:	
Participants	$ 264,773,192
Interest paid by participants	6,119,066
Repayment of refunds	856,751
Total participant contributions	271,749,009
Employer:	
General Revenue Fund	1,568,043,527
Employing state agencies and appropriations	799,591,271
Paid by participants	1,270,598
Total employer contributions	2,368,905,396
Total contributions	2,640,654,405
Investment income:	
Net appreciation/(depreciation) in fair value of investments	644,850,428
Interest and dividends from investments	206,605,320
Interest earned on cash balances	2,861,245
Less investment expense	(24,988,274)
Net investment income/(loss)	829,328,719
Total revenues	$ 3,469,983,124

SUMMARY SCHEDULE OF CASH RECEIPTS & DISBURSEMENTS

For the Year Ended June 30, 2020

Cash balance, beginning of year	$ 211,289,280
Receipts:	
Participant contributions	279,963,176
Employer contributions (net of bond principal and interest transfers)	799,453,423
General Revenue Fund/Pension Contribution Fund	1,547,970,044
Transfers from Illinois State Board of Investment	214,000,000
Interest income on cash balance	3,023,294
Claims receivable payments	7,054,069
Installment payments	2,698,965
Buyout program bond proceeds	79,399,137
Other	800,567
Total cash receipts	2,934,362,675
Disbursements:	
Annuity payments:	
Retirement annuities	2,492,812,505
Widow's and Survivor's annuities	161,234,846
Disability benefits	61,015,233
Lump Sum benefits	12,298,163
Buy Out Payments	79,399,137
Refunds (including transfers to reciprocal systems)	34,487,983
Refund to the General Revenue Fund	-
Administrative expenses	19,405,188
Total cash disbursements	2,860,653,055
Cash balance, end of year	$ 284,998,900

SCHEDULE OF PAYMENTS TO CONSULTANTS & ADVISORS

For the Year Ended June 30, 2020

Legal Services	$ 29,189
Actuarial Costs	123,158
Audit Expense	105,736
Physicians and Disability Inspections	196,188
Financial Planning	30,073
Management Consultants	1,158,711
TOTAL	$ 1,643,055

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

Board of Trustees
State Employees' 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 State Employees' Retirement System (System), a pension trust fund of the State of Illinois, as of and for the year ended June 30, 2020, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents and we have issued our report thereon dated December 17, 2020. Our report includes a reference to other auditors who audited the financial statements of the Illinois State Board of Investment, an internal investment pool of the State of Illinois, as described in our report on the System's financial statements. This report does not include the results of the other auditors' testing of internal control over financial reporting (internal control) or compliance and other matters of the Illinois State Board of Investment that are reported on separately by those auditors. Our report also includes a reference to the fact that the actuarially determined net pension liability is dependent on several assumptions, including the assumption that future required contributions from State sources are made based on statutory requirements.

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
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, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. 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 an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

SIGNED ORIGINAL ON FILE

Schaumburg, Illinois
December 17, 2020