

**GENERAL ASSEMBLY RETIREMENT SYSTEM OF  
THE STATE OF ILLINOIS**

FINANCIAL AUDIT  
FOR THE YEAR ENDED JUNE 30, 2019

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



**General Assembly Retirement System  
of the State of Illinois**

**Financial Audit**

**For the Year Ended June 30, 2019**

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**General Assembly Retirement System  
of the State of Illinois**

**Financial Audit  
For the Year Ended June 30, 2019**

**System Officials**

Executive Secretary	Timothy B. Blair
Accounting Division Manager	Alan Fowler, CPA
Division Manager	Angie Ackerson
Internal Audit	Casey Evans

**Governing Board**

Chair of the Board of Trustees	Representative Robert Martwick
Trustee (Vice-Chair)	Senator Sue Rezin
Trustee	Senator Napoleon Harris III
Trustee	Senator Don Harmon
Trustee	Representative Charles Meier
Trustee	Representative Michael Zalewski
Trustee	Representative Daniel Pierce, Retired Annuitant Member

**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 General Assembly Retirement System of the State of Illinois (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 November 20, 2019.

**Independent Auditor's Report**

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

Board of Trustees, General Assembly 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 General Assembly Retirement System of the State of Illinois (System), as of June 30, 2019, 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 2019 financial statements of the Illinois State Board of Investment, an internal investment pool of the State of Illinois, which statements represent 90 percent, 91 percent and 12 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, 2019, 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 23 through 25. 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 4 through 6 and the required supplementary information as listed in the table of contents on pages 28 through 31 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 for the year ended June 30, 2019 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 for the year ended June 30, 2019 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 for the year ended June 30, 2019 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 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 for the year ended June 30, 2019.

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

In accordance with *Government Auditing Standards*, we have also issued our report dated December 13, 2019 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 13, 2019

## MANAGEMENT'S DISCUSSION AND ANALYSIS

This section presents management's discussion and analysis of the financial position and performance of the General Assembly Retirement System (System) for the year ended June 30, 2019. 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 126 active participants and 429 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, 2019, 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, 2019. This financial information also summarizes the changes in the 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, information on State contributions, and investment returns.
3. **Other Supplementary Schedules.** Other supplementary 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 \$2.9 million during fiscal year 2019. This change was primarily the result of increases in investments of \$2.0 million during fiscal year 2019.
- The System was funded at 15.7% as of June 30, 2019.
- The overall rate of return for the Illinois State Board of Investment (ISBI) Commingled Fund was a gain of 7.1% in fiscal year 2019. The System's annual money-weighted rate of return on its investment in the ISBI Commingled Fund was a gain of 7.2% for fiscal year 2019.

## MANAGEMENT'S DISCUSSION AND ANALYSIS

### Condensed Statements of Fiduciary Net Position (in thousands)

	As of June 30,		Increase/(Decrease) from
	2019	2018	2018 to 2019
Cash	\$ 4,144.0	\$ 4,718.3	\$ (574.3)
Receivables	1,049.6	684.7	364.9
Investments, at fair value *	55,467.4	53,436.9	2,030.5
Capital Assets, net	32.0	22.6	9.4
Total assets	<u>60,693.0</u>	<u>58,862.5</u>	<u>1,830.5</u>
Liabilities *	973.8	2,046.2	(1,072.4)
Total fiduciary net position	<u>\$ 59,719.2</u>	<u>\$ 56,816.3</u>	<u>\$ 2,902.9</u>

\* 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 \$1.3 million for both years ended June 30, 2019 and June 30, 2018. Participant contribution rates are set by statute as a percentage of gross salary. For fiscal year 2019, employer contributions increased to approximately \$23.3 million from \$21.2 million in fiscal year 2018. This increase was the result of the actuarially determined employer contributions required by the State's funding plan.

### DEDUCTIONS FROM FIDUCIARY NET POSITION

Deductions from Fiduciary Net Position are primarily benefit and refund payments. During fiscal years 2019 and 2018, the System paid out approximately \$24.6 million and \$23.3 million in benefits and refunds, respectively. This increase of 5.5% from 2018 to 2019 is mainly the result of the annual scheduled 3% increase in retirement and other benefit payments as well as the retirees and beneficiaries. The administrative costs of the System represented less than 2% of the total deductions in each of the fiscal years presented within the condensed statements.

### Condensed Statements of Changes in Fiduciary Net Position (in thousands)

	For the Year Ended June 30,		Increase/(Decrease) from
	2019	2018	2018 to 2019
<b>Additions</b>			
Participant contributions	\$ 1,317.2	\$ 1,255.2	\$ 62.0
Employer contributions	23,253.4	21,155.0	2,098.4
Net Investment income gain/(loss)	3,449.4	3,733.5	(284.1)
Total additions	<u>28,020.0</u>	<u>26,143.7</u>	<u>1,876.3</u>
<b>Deductions</b>			
Benefits	24,558.4	23,283.0	1,275.4
Refunds	168.9	44.9	124.0
Administrative expenses	389.8	348.4	41.4
Total deductions	<u>25,117.1</u>	<u>23,676.3</u>	<u>1,440.8</u>
Net increase/(decrease) in fiduciary net position	<u>\$ 2,902.9</u>	<u>\$ 2,467.4</u>	<u>\$ 435.5</u>

### 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 15.7% on June 30, 2019. The amount by which the total pension liability exceeded the fiduciary net position was \$321.8 million on June 30, 2019.

### 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, State Employees' 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 Fiduciary Net Position of each participating entity.

The net investment income of the total ISBI Commingled Fund was approximately \$1,184.0 million during fiscal year 2019, resulting in a return of 7.1%. 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 periods ended June 30, 2019, the ISBI Commingled Fund earned a compounded rate of return of 9.0%, 6.1%, and 9.2%, 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.

### FUTURE OUTLOOK

The actuarial assumptions adopted as of June 30, 2019 were based on the experience review for the three years ended June 30, 2018, and annual review of all economic assumptions. The state's statutory employer contribution for fiscal year 2020 will increase by \$2.5 million, or 10.9%.

Tier 2 active members' annual earnings on which they can contribute were capped at \$122,547 in 2019 and will be capped at \$124,630 in 2020. The caps on Tier 2 members' earnings decreases the anticipated amount of future earnings credit as well as the associated contributions.

Benefit payments are projected to continue to grow at a rate of approximately 4% to 6%, primarily as a result of the increasing numbers of retirees and the 3% annual COLA.

The ISBI plans to continue to improve the overall investment portfolio performance by increasing reliance on passive investment strategies and reducing investment advisor and management fees.

### REQUESTS FOR INFORMATION

This financial report is designed to provide a general overview of the Systems' finances. For questions concerning the information in this report or for additional information, contact the Accounting Division of the State Retirement Systems at [srsacctgdiv@srs.illinois.gov](mailto:srsacctgdiv@srs.illinois.gov).



# FINANCIAL STATEMENTS

## GENERAL ASSEMBLY RETIREMENT SYSTEM, STATE OF ILLINOIS

### Statement of Fiduciary Net Position

June 30, 2019

Assets	
Cash	\$ 4,144,035
Receivables:	
Employer contributions	967,540
Participants' contributions	73,773
Refundable annuities	2,374
Interest on cash balances	5,889
Total receivables	<u>1,049,576</u>
Investments:	
Investments - held in the Illinois State Board of Investment Commingled Fund at fair value	54,604,432
Securities lending collateral with State Treasurer	863,000
Total Investments	<u>55,467,432</u>
Capital Assets, net	<u>31,952</u>
Total Assets	<u>60,692,995</u>
Liabilities	
Administrative expenses payable	37,774
Due to Judges' Retirement System of Illinois	73,001
Securities lending collateral	863,000
Total Liabilities	<u>973,775</u>
Net position – restricted for pensions	<u>\$ 59,719,220</u>

*See accompanying notes to financial statements.*

## FINANCIAL STATEMENTS

# GENERAL ASSEMBLY RETIREMENT SYSTEM, STATE OF ILLINOIS

### Statement of Changes in Fiduciary Net Position for the Year Ended June 30, 2019

Additions:	
Contributions:	
Participants	\$ 1,317,187
Employer	23,253,426
Total contributions	<u>24,570,613</u>
Investment income:	
Net appreciation/(depreciation) in fair value of investments	2,569,372
Interest and dividends	954,406
Less investment expense	(74,362)
Net investment income (loss)	<u>3,449,416</u>
Total Additions	<u>28,020,029</u>
Deductions:	
Benefits:	
Retirement annuities	20,590,350
Survivors' annuities	3,968,090
Total benefits	<u>24,558,440</u>
Refunds of contributions	168,920
Administrative expenses	389,833
Total Deductions	<u>25,117,193</u>
Net increase/(decrease) in net position	<u>2,902,836</u>
Net position - restricted for pensions:	
Beginning of year	<u>56,816,384</u>
End of year	<u>\$ 59,719,220</u>

*See accompanying notes to financial statements.*

## FINANCIAL STATEMENTS

# GENERAL ASSEMBLY RETIREMENT SYSTEM, STATE OF ILLINOIS

Notes to Financial Statements June 30, 2019

### 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 General Assembly Retirement System (System) is administered by a Board of Trustees consisting of seven persons, which include the President of the Senate, ex-officio, or his designee, two members of the Senate appointed by the President of the Senate, three members of the House of Representatives appointed by the Speaker of the House of Representatives, and one person elected from the member annuitants. Operation of the System and the direction of its policies are the responsibility of the Board of Trustees.

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, 2019, the System membership consisted of:

	2019
Retirees and beneficiaries	
currently receiving benefits:	
Retirement annuities	323
* Survivors' annuities	106
Reversionary annuities	-
	<u>429</u>
Inactive participants entitled to benefits but not yet receiving them	54
Total	<u>483</u>
Active participants:	
Vested	60
Nonvested	66
Total	<u>126</u>

\* Excludes 12 alternate payees resulting from QILDRO's

### 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 participants. The plan is comprised of two tiers of contribution requirements and benefit levels. Tier 1 pertains to participants who first became a participant of the System prior to January 1, 2011. Tier 2 pertains to participants who first became a participant of the System on or after January 1, 2011.

## FINANCIAL STATEMENTS

### a. Eligibility and Membership

The General Assembly Retirement System covers members of the General Assembly of the State and persons elected to the offices of Governor, Lieutenant Governor, Secretary of State, Treasurer, Comptroller and Attorney General for the period of service in such offices and the Clerks and Assistant Clerks of the respective Houses of the General Assembly. Participation by eligible persons is optional.

### b. Contributions

In accordance with Chapter 40, Section 5/2-126 of the Illinois Compiled Statutes, participants contribute specified percentages of their salaries for retirement annuities, survivors' annuities, and automatic annual increases as shown below. Tier 1 participants contribute based on total annual compensation. Beginning January 1, 2011, Tier 2 participants contribute based on an annual compensation rate not to exceed \$106,800 with limitations for future years increased by the lesser of 3% or the annual percentage increase in the Consumer Price Index. The compensation limitation for 2019 was \$122,547. Contributions are excluded from gross income for Federal and State income tax purposes. The total contribution rate is 11.5% as shown below:

8.5%	Retirement annuity
2.0%	Survivors' annuity
1.0%	Automatic annual increases
<u>11.5%</u>	

The statutes governing the General Assembly Retirement System provide for optional contributions by participants, with interest at prescribed rates, to retroactively establish service credits for periods of prior creditable service.

The Board of Trustees has adopted the policy that interest payments by a participant, included in optional contributions to retroactively establish service credits, shall be considered an integral part of the participant's investment in annuity expectancies and, as such, shall be included as a part of any refund payable.

The payment of (1) the required State contributions, (2) all benefits granted under the System and (3) all expenses in connection with the administration and operation thereof are the obligations of the State to the extent specified in Chapter 40, Article 5/2 of the Illinois Compiled Statutes.

### c. Benefits Retirement Annuity: Tier 1

Participants have vested rights to full retirement benefits beginning at age 55 with at least 8 years of credited service or at age 62 with at least 4 years of credited service.

The retirement annuity is determined according to the following formula based upon the applicable final salary:

- 3.0% for each of the first 4 years of service
- 3.5% for each of the next 2 years of service
- 4.0% for each of the next 2 years of service
- 4.5% for each of the next 4 years of service
- 5.0% for each year of service in excess of 12 years.

The maximum retirement annuity is 85% of the applicable final salary. Annual automatic increases of 3% of the current amount of retirement annuity are provided.

### Retirement Annuity: Tier 2

Participants have vested rights to full retirement benefits at age 67 with at least 8 years of credited service or reduced retirement benefits at age 62 with at least 8 years of credited service.

The retirement annuity provided is 3% for each year of service based upon the applicable final average salary. The maximum retirement annuity is 60% of the applicable final average salary. Annual automatic increases equal to the lesser of 3% or the annual change in the Consumer Price Index are provided.

### Other Benefits

The General Assembly Retirement System also provides survivors' annuity benefits, reversionary annuity benefits, and under certain specified conditions, lump-sum death benefits.

Participants who terminate service may receive, upon application, a refund of their total contributions. Participants who are not married are entitled to refunds of their contributions for survivors.

## 3. Summary of Significant Accounting Policies and 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.

Participant 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

GASB Statement No. 83, "Certain Asset Retirement Obligations", addresses accounting and financial reporting for certain asset retirement obligations (AROs). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. A government that has legal obligations to perform future asset retirement activities related to its tangible capital assets should recognize a liability based on the guidance in this Statement. This GASB is effective for fiscal years beginning after June 15, 2018 (FY 2019) and it has been determined that it will not impact the System's financial statements.

GASB Statement No. 88, "Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements", defines debt for purposes of disclosure in notes to financial statements as a liability that arises from a contractual obligation to pay cash (or other assets that may be used in lieu of cash) in one or more payments to settle an amount that is fixed at the date the contractual obligation is established. The Statement requires that additional essential information related to debt be disclosed in notes to financial statements, including unused lines of credit; assets pledged as collateral for the debt; and terms specified in debt agreements related to significant events of default with finance-related consequences, significant termination events with finance-related consequences, and significant subjective acceleration clauses. This GASB is effective for fiscal years beginning after June 15, 2018 (FY 2019) and it has been determined that it will not impact the System's financial statements.

### d. 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.

### e. 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.

## FINANCIAL STATEMENTS

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.

### f. 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 period from July 1, 2015 to June 30, 2018 resulting in the adoption of new assumptions as of June 30, 2019. Assumptions changes include changes to the investment returns, rate of inflation, mortality and others as detailed in the Required Supplementary Information of this CAFR.

### g. 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.

Administrative expenses common to the General Assembly Retirement System and the Judges' Retirement System are allocated 25% to the General Assembly Retirement System and 75% to the Judges' Retirement System.

Invoices/vouchers covering common expenses incurred are paid by the Judges' Retirement System, and the appropriate amount is allocated to and reimbursed by the General Assembly Retirement System. Administrative expenses allocated to and reimbursed by the General Assembly Retirement System as of June 30, 2019 was \$227,729. The total administrative expenses attributable to the General Assembly Retirement System is \$389,833 for fiscal year 2019.

### h. 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 three fiscal years.

### 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.

## FINANCIAL STATEMENTS

### 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 1% (\$54,604,432) of the net position of the ISBI commingled fund as of June 30, 2019. 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, 2019. 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, 2019
U.S. govt. and agency obligations	\$ 249,211,178
Foreign obligations	145,836,447
Corporate obligations	687,426,898
Municipal bonds	2,174,758
Common stock & equity funds	2,961,709,654
Commingled funds	10,791,639,807
Foreign equity securities	233,173,589
Foreign preferred stock	50,471
Hedge funds	141,715,793
Opportunistic debt	506,150,801
Real estate funds	1,737,430,583
Private equity	779,475,084
Infrastructure	316,264,251
Bank loans	392,020,733
Money market instruments	156,715,534
Total investments	<u>\$ 19,100,995,581</u>

#### Rate of Return

For the fiscal year ended June 30, 2019, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 7.2%. 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, 2019, the ISBI had a non-investment related bank balance of \$515,822. 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 A+ Long-term Deposit/Debt rating by Standard & Poor's and an A2 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, 2019, the ISBI had an investment related bank balance of \$10,098,916. 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 \$2.2 billion at the end of fiscal year 2019. The ISBI's real estate, private equity, infrastructure and opportunistic debt investment portfolios consist of passive interests in limited partnerships. At the end of fiscal year 2019, the ISBI had no outstanding commitments to separate real estate accounts within the real estate and private equity investment portfolios. 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;
- Foreign Government Obligations and Foreign Corporate Obligations: brokers 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, Foreign Preferred Stocks, Foreign Equity Securities and Commingled Funds-Domestic and Foreign: quoted prices for identical securities in an active market. Brokers 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.



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The recurring fair value measurements for the year ended June 30, 2019 are as follows:

At June 30, 2019

Fair Value Measurements Using

	Level 1	Level 2	Level 3	Totals
Investments by fair value level				
Debt Securities				
Government and agency obligations	\$ -	\$ 249,211,178	\$ -	\$ 249,211,178
Municipal bonds	-	2,174,758	-	2,174,758
Foreign obligations	-	144,492,096	1,344,351	145,836,447
Corporate obligations	-	682,393,510	5,033,388	687,426,898
Bank loans	-	355,891,348	36,129,385	392,020,733
Total debt securities	<u>\$ -</u>	<u>\$ 1,434,162,890</u>	<u>\$ 42,507,124</u>	<u>\$ 1,476,670,014</u>
Equity Securities				
Common stock and equity funds	\$ 2,959,422,375	\$ 665,184	\$ 1,622,095	\$ 2,961,709,654
Foreign equity securities	231,976,472	-	1,197,117	233,173,589
Foreign preferred stocks	50,471	-	-	50,471
Total equity securities	<u>\$ 3,191,449,318</u>	<u>\$ 665,184</u>	<u>\$ 2,819,212</u>	<u>\$ 3,194,933,714</u>
Other				
Commingled funds <sup>1</sup>	\$ 10,332,807,146	\$ -	\$ -	\$ 10,332,807,146
Total other	<u>\$ 10,332,807,146</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 10,332,807,146</u>
Total investments by fair value level	<u>\$ 13,524,256,464</u>	<u>\$ 1,434,828,074</u>	<u>\$ 45,326,336</u>	<u>\$ 15,004,410,874</u>
Investments measured at the Net Asset Value (NAV)				
Commingled funds				\$ 458,832,661
Real estate funds				1,737,430,583
Private equity				779,475,084
Infrastructure				316,264,251
Opportunistic debt				506,150,801
Hedge funds				141,715,793
Total investments measured at the NAV				<u>\$ 3,939,869,173</u>
Investments not measured at fair value				
Money market instruments				<u>\$ 156,715,534</u>
Total investments				<u>\$ 19,100,995,581</u>

1. Commingled funds with readily determinable fair value reported as Level 1.

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.

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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, 2019			
	Fair Value	Unfunded Commitments*	Redemption Frequency	Redemption Notice Period
Commingled funds	\$ 458,832,661	-	Quarterly	90 Days
Real estate funds	1,737,430,583	\$ 474.1	Quarterly	90 Days
Private equity	779,475,084	793.6	N/A	N/A
Opportunistic debt	506,150,801	872.6	N/A	N/A
Hedge funds	141,715,793	-	Quarterly	90 Days
Infrastructure	316,264,251	23.3	Quarterly	90 Days
Total Investments measured at the NAV	<u>\$ 3,939,869,173</u>			

\* In millions

1) Commingled Funds – The ISBI’s investments in this category consist of assets that are blended together with other investments in order to provide economies of scale which allows 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 equity markets. Commingled funds are also called “pooled funds” and “master trusts”. Investment strategies consist of investments in eighteen domestic and international public equity and fixed income funds, seven diversified funds focusing on emerging markets and five long-only equity funds. 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, 2019. It is not probable that any investments sold will be sold at an amount different from the current NAV of the plan’s ownership interest.

2) Private Equity – The ISBI’s assets in this category consist of investments in funds not listed in public exchanges. Investment strategies consist of investments in seventy funds with the goals of generating returns significantly greater than typically available in the public market and diversifying the ISBI’s overall portfolio which is comprised predominantly of fixed income and equity 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, 2019. It is not probable that any investments sold will be sold at an amount different from the current NAV of the plan’s ownership interest.

3) Hedge Funds – The ISBI is currently in the process of transitioning investments in hedge fund vehicles to long-only equity vehicles. 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. Investment strategies currently consist 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. As of June 30, 2019, for the majority of the hedge fund investments, the ISBI has plans to transition out entirely or to long only equity assets. It is not probable that any investments sold will be sold at an amount different from the current NAV of the plan’s ownership interest.

4) Infrastructure – The ISBI’s assets in this category consist of investments in funds that identify infrastructure assets which provide essential services or facilities to a community (ports, bridges, toll roads etc.) and are typically made as a privatization initiative on the part of a government entity. Investment strategies consist of investments in six funds with the goals of diversifying the ISBI’s overall portfolio which is comprised predominantly of fixed income and equity assets and providing capital appreciation and income generation. The fair

## FINANCIAL STATEMENTS

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, 2019. It is not probable that any investments sold will be sold at an amount different from the current NAV of the plan's ownership interest.

5) Opportunistic Debt – This category consists of investments in private fixed income markets. Investment strategies consist of investments in thirty 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 fixed income and equity 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, 2019. It is not probable that any investments sold will be sold at an amount different from the current NAV of the plan's ownership interest.

6) Real Estate Funds – The ISBI's assets in this category consist of investments in the Core and Non-Core Real Estate Fund categories. Investment strategies consist of investments in forty 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, 2019. It is not probable that any investments sold will be sold at an amount different from the current NAV of the plan's ownership interest.

In addition, historically certain real estate investments are leveraged whereby partnerships have been established to purchase properties through a combination of contributions from the ISBI and through acquisition of debt. At June 30, 2019, these specific investments were in the process of winding down, therefore, no debt is currently associated with them.

### 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, 2019, 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.

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### 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 duration consistent with the Barclay's U.S. Universal Index (benchmark index). As of June 30, 2019, the effective weighted duration of the ISBI's fixed income portfolio was 3.9 years and the effective duration of the benchmark index was 5.6 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, 2019:

Investment Type	Fair Value	Effective Weighted Duration Years
U.S. Govt. and Agency Obligations		
U.S. Government	\$ 137,474,273	17.3
Federal Agency	111,736,905	0.7
Municipal Bonds	2,174,758	8.9
Foreign Obligations	145,836,447	5.0
Corporate Obligations		
Bank & Finance	384,384,066	1.0
Industrial	28,443,584	2.4
Other	274,599,248	1.9
Total	<u>\$ 1,084,649,281</u>	

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, 2019, the weighted average maturity of ISBI's bank loan portfolio was 5.4 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, 2019. The table on the next page, presents the quality ratings of debt securities held by the ISBI as of June 30, 2019.

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	Moody's Quality Rating	
U.S. Government and Agency Obligations	AAA	\$ 228,539,950
	Not Rated	20,671,228
Total U.S. Government and Agency Obligations		<u>\$ 249,211,178</u>
Municipal Bonds		
	BAA	\$ 291,344
	BA	77,000
	CA	417,079
	Not Rated	1,389,335
Total Municipal Bonds		<u>\$ 2,174,758</u>
Foreign Obligations		
	A	\$ 4,364,260
	BAA	19,812,291
	BA	26,487,958
	B	49,504,144
	CAA	18,146,476
	C	457,938
	Not rated	27,063,380
Total Foreign Obligations		<u>\$ 145,836,447</u>
Corporate Obligations		
Bank and Finance		
	A	\$ 278,372,451
	BAA	966,420
	BA	34,339,146
	B	9,465,868
	CAA	11,063,162
	CA	314,125
	Not Rated	49,862,895
Total Bank and Finance		<u>\$ 384,384,066</u>
Industrial		
	BA	\$ 1,301,169
	B	15,771,460
	CAA	10,635,088
	C	178,970
	Not Rated	556,897
Total Industrial		<u>\$ 28,443,584</u>
Other		
	A	\$ 76,339,274
	BAA	2,043,298
	BA	33,091,099
	B	90,633,361
	CAA	46,064,297
	CA	4,040,166
	C	86,400
	Not Rated	22,301,353
Total Other		<u>\$ 274,599,248</u>
Total Corporate Obligations		<u>\$ 687,426,898</u>
Total Bank Loans	Not Rated	<u>\$ 392,020,733</u>
Total Money Market	Not Rated	<u>\$ 156,715,534</u>

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### 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 and real estate funds trade in a reported currency of Euro-based dollars valued at \$144,982,620 as of June 30, 2019. The table below presents the foreign currency risk by type of investment as of June 30, 2019.

Currency	2019	
	Foreign Equity Securities & Foreign Preferred Stock	Foreign Obligations
Australian Dollar	\$ 4,103,129	\$ -
Canadian Dollar	12,261,123	-
Danish Krone	966,170	-
English Pound Sterling	27,770,930	-
Euro Currency	72,549,960	-
Hong Kong Dollar	12,967,971	-
Japanese Yen	48,061,352	-
Mexican Peso	1,834,533	-
New Israeli Sheqel	216,831	-
New Zealand Dollar	770,757	-
Norwegian Krone	651,149	-
Singapore Dollar	1,409,626	-
South African Rand	4,400	-
South Korean Won	4,493,569	-
Swedish Krona	3,017,935	-
Swiss Franc	25,477,021	-
Thailand Baht	2,142,558	-
UAE Dirham	229,583	-
Foreign investments denominated in U.S. Dollars	<u>14,295,463</u>	<u>145,836,447</u>
Total	<u>\$ 233,224,060</u>	<u>\$ 145,836,447</u>

### Securities Lending

The ISBI participated in a securities lending program with Deutsche Bank AG, New York Branch which was discontinued prior to June 30, 2019. There were no outstanding loans or balances associated with any of the related financial statement accounts on the Statement of Net Position as of June 30, 2019.

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 2019, 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%.

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The State Treasurer did not impose any restrictions during fiscal year 2019 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 2019 resulting from a default of the borrowers or Deutsche Bank AG.

During fiscal year 2019, 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, 2019 were \$3,103,274,125 and \$3,064,814,670, respectively. The System's portion of securities lending collateral that was invested in repurchase agreements as of June 30, 2019 was \$863,000.

### 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 forward foreign currency contracts, futures, rights and warrants. 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.

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Rights and warrants allow the ISBI's 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. Under certain circumstances, a type of warrant called Participatory Notes (P-Notes) are used in the portfolio by the ISBI's investment managers that are not registered to trade in domestic Indian Capital Markets. P-Notes are issued by Indian-based brokerage firms against an underlying Indian security permitting holders to get a share in the income from the security. These investments are reported at fair value in the investment section of the ISBI's 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's Statement of Changes in Net Position.

Futures contracts are exchange traded instruments where the fair value is determined by the equilibrium between the forces of supply and demand. The fair value of a right or warrant closely tracks the intrinsic value of the underlying stock and can be determined either by formulaic methodology (most commonly Black-Scholes) or intrinsic value methodology.

The table below presents the investment derivative instruments aggregated by type that were held by the ISBI as of June 30, 2019.

	Changes in Fair Value	Fair Value at Year End	Notional Amount Number of Shares
	2019	2019	2019
FX Forwards	\$ 7,847,062	\$ -	-
Rights/Warrants	(180,086)	1,426	125,206
Swap Liabilities	(1,624,578)	(1,624,578)	-
	<u>\$ 6,042,398</u>	<u>\$ (1,623,152)</u>	<u>125,206</u>

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.

The ISBI's derivative investments in foreign currency forward contracts are held with counterparties. No contracts of this type were held as of June 30, 2019.



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### 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 2019, the actuary used the projected unit credit actuarial method for determining the proper employer contribution amount.

For fiscal year 2019, the required employer contribution was 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 provides 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 total amount of statutorily required employer contributions for fiscal year 2019 was \$23,221,000. The total amount of employer contributions received from the state and other sources during fiscal year 2019 was \$23,253,426.

### 6. Net Pension Liability of the State

The components of the State's net pension liability for this plan at June 30, 2019 are as follows:

Total Pension Liability (TPL)	Plan Fiduciary Net Position (FNP)	Net Pension Liability	Plan FNP as % of TPL
\$381,562,351	\$59,719,220	\$321,843,131	15.65%

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.

#### Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of June 30, 2019, 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:

Actuarial Cost Method: Individual Entry-Age

#### Mortality rates:

Post retirement: Pub-2010 Above-Median Income General Healthy Retiree Mortality tables, sex distinct, with scaling factors of 99 percent for males and females, and the MP-2018 two-dimensional generational mortality improvement scale, providing a margin for future mortality improvements.

#### Pre-retirement:

Including terminated vested members prior to attaining age 50 Pub-2010 Above-Median Income General Employee Mortality tables, sex distinct, with no scaling factors, and the MP-2018 two-dimensional generational mortality improvement scale. This assumption provides a margin for future mortality improvements. Future mortality improvements are reflected by projecting the base mortality tables forward from the year 2010 using the MP-2018 projection scale.

Inflation: 2.25%

Investment rate of return: 6.5%

Salary increases: 2.5% per year (consisting of an inflation component of 2.25% per year, a productivity component of .25% per year).

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**Group size growth rate:** Based on recent experience, the size of the current active group is projected to decrease by approximately 50% by the year 2054 due to the assumption that 50% of future members will elect to opt out of participating in the System.

**Post-retirement increase:** Tier 1: 3.0% per year, compounded annually. Tier 2: 3.0% per year or the annual change in the Consumer Price Index, whichever is less, compounded annually.

### 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 4.77% and a standard deviation of 12.9% for the aggregate portfolio.

Asset Class	Asset Allocation	
	Target Allocation	20 Year Simulated Real Rate of Return
U.S. Equity	23%	4.8%
Developed Foreign Equity	13%	4.6%
Emerging Market Equity	8%	6.9%
Private Equity	7%	6.8%
Intermediate Investment Grade Bonds	14%	0.7%
Long-term Government Bonds	4%	1.0%
TIPS	4%	0.8%
High Yield and Bank Loans	5%	2.7%
Opportunistic Debt	8%	4.2%
Emerging Market Debt	2%	2.7%
Real Estate	10%	4.4%
Infrastructure	2%	4.1%
Total	100%	

### Discount Rate

A single discount rate of 6.41% was used to measure the total pension liability as of June 30, 2019. This represents a decrease of 0.27% from the discount rate used for the June 30, 2018 valuation, 6.68%.

The single discount rate was based on the June 30, 2019 expected rate of return on pension plan investments of 6.5% and a municipal bond rate, based on an index of 20-year general obligation bonds with an average AA credit rating as published by the Federal Reserve, of 3.13% as of June 30, 2019. The projection of cash flows used to determine the single discount rates 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 statutory contribution rates 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 2072 at June 30, 2019. As a result, for fiscal year 2019, the long-term expected rate of return on pension plan investments was applied to projected benefit payments through 2072, and the municipal bond rate was applied to all benefit payments after that date.

## FINANCIAL STATEMENTS

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

For fiscal year 2019, the following table presents the plan's net pension liability using a single discount rate of 6.41%, 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, 2019		
		Current	
	1% decrease 5.41%	Discount Rate 6.41%	1% increase 7.41%
State's net pension liability	\$364,537,251	\$321,843,131	\$286,146,808

## 7. Administrative Expenses

A summary of the administrative expenses for the General Assembly Retirement System for fiscal year 2019 is listed below.

	2019
Personal services	\$117,379
Employee retirement contributions paid by employer	1,433
Employer retirement contributions	60,461
Social security contributions	8,626
Group insurance	29,457
Contractual services	153,741
Travel	1,770
Printing	84
Commodities	21
Telecommunications	346
Information technology	10,478
Automotive	905
Depreciation/amortization	2,150
Change in accrued compensated absences	2,963
Interest on lease obligation	19
Total	\$389,833

## 8. Compensated Absences

Employees of the General Assembly Retirement 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. Accrued compensated absences, which are included in administrative expenses payable, are shown in the following table:

	2019			
	Beginning Balance	Additions	Deletions	Ending Balance
Accrued Compensated Absences	\$ 7,602	\$ 15,041	\$ (12,078)	\$ 10,565

### 9. Pension Plan & Other Post-Employment Benefits

**Plan Description.** All of the System's full-time employees who are not eligible for participation in another state-sponsored retirement plan participate in the State Employees' Retirement System (SERS), which is a pension trust fund in the State of Illinois reporting entity.

The SERS is a single-employer defined benefit public employee retirement system (PERS) in which state employees participate, except those covered by the State Universities, Teachers', General Assembly, and Judges' Retirement Systems.

The financial position and results of operations of the SERS for fiscal year 2019 is included in the State of Illinois' Comprehensive Annual Financial Report (CAFR) for the year ended June 30, 2019. The SERS also issues a separate CAFR that may be obtained by writing to the SERS, 2101 South Veterans Parkway, Springfield, Illinois 62794-9255 or by calling 217-785-7202.

The State of Illinois' CAFR may be obtained by writing to the State Comptroller's Office, Financial Reporting Department, 325 West Adams St., Springfield, Illinois 62704-1858 or by calling 217-782-2053.

A summary of SERS' 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 SERS' CAFR. Also included is a discussion of employer and employee obligations to contribute and the authority under which those obligations are established.

**Other Post-Employment Benefits.** 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 5% 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 cost 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.

## FINANCIAL STATEMENTS

### 10. Capital Assets

Capital assets over \$100 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) certain electronic data processing equipment - 3 years, and (4) internally developed software - 20 years. The summary of changes in Capital Assets for fiscal year 2019 is as follows:

	Beginning Balance	2019 Current Year Additions	Current Year Deletions	Ending Balance
Fixed Assets				
Equipment	\$ 17,020	\$ 367	\$ (1,404)	\$ 15,983
Capitalized Software Costs	<u>25,214</u>	<u>11,119</u>	<u>-</u>	<u>36,333</u>
Total	<u>42,234</u>	<u>11,486</u>	<u>(1,404)</u>	<u>52,316</u>
Accumulated Depreciation				
Equipment	(16,353)	(333)	1,404	(15,282)
Capitalized Software Costs	<u>(3,266)</u>	<u>(1,816)</u>	<u>-</u>	<u>(5,082)</u>
Total	<u>(19,619)</u>	<u>(2,149)</u>	<u>1,404</u>	<u>(20,364)</u>
Net Capital Assets	<u>\$ 22,615</u>	<u>\$ 9,337</u>	<u>\$ -</u>	<u>\$ 31,952</u>

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN THE STATE'S NET  
PENSION LIABILITY AND RELATED RATIOS  
Fiscal Years Ended June 30, 2019 through 2014

	2019	2018	2017
<b>Total pension liability</b>			
Service cost	\$ 3,280,072	\$ 3,535,911	\$ 3,879,813
Interest on the total pension liability	24,852,899	24,541,949	24,045,958
Difference between expected and actual experience	4,007,760	1,197,364	2,093,742
Assumption changes	(8,252,643)	(1,213,112)	(2,430,609)
Benefit payments	(24,558,440)	(23,283,020)	(22,362,526)
Refunds	(168,920)	(44,856)	(130,885)
Administrative expense	(389,833)	(348,384)	(355,711)
<b>Net change in total pension liability</b>	<u>(1,229,105)</u>	<u>4,385,852</u>	<u>4,739,782</u>
<b>Total pension liability - beginning</b>	<u>382,791,456</u>	<u>378,405,604</u>	<u>373,665,822</u>
<b>Total pension liability - ending (a)</b>	<u>\$381,562,351</u>	<u>\$382,791,456</u>	<u>\$378,405,604</u>
<b>Plan fiduciary net position</b>			
Contributions - employer	\$ 23,253,426	\$ 21,155,000	\$ 21,721,000
Contributions - participant	1,317,187	1,255,232	1,284,707
Net investment income	3,449,416	3,733,504	5,140,250
Benefit payments	(24,558,440)	(23,283,020)	(22,362,526)
Refunds	(168,920)	(44,856)	(130,885)
Administrative expense	(389,833)	(348,384)	(355,711)
<b>Net change in plan fiduciary net position</b>	<u>2,902,836</u>	<u>2,467,476</u>	<u>5,296,835</u>
<b>Plan fiduciary net position - beginning</b>	<u>56,816,384</u>	<u>54,348,908</u>	<u>49,052,073</u>
<b>Plan fiduciary net position - ending (b)</b>	<u>\$ 59,719,220</u>	<u>\$ 56,816,384</u>	<u>\$ 54,348,908</u>
<b>State's net pension liability - ending (a)-(b)</b>	<u>\$321,843,131</u>	<u>\$325,975,072</u>	<u>\$324,056,696</u>
<b>Plan fiduciary net position as a percentage of the total pension liability</b>	15.65%	14.84%	14.36%
<b>Covered payroll</b>	\$ 10,159,312	\$ 10,711,024	\$ 10,996,284
<b>State's net pension liability as a percentage of covered payroll</b>	3,167.96%	3,043.36%	2,946.97%

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN THE STATE'S NET  
PENSION LIABILITY AND RELATED RATIOS  
Fiscal Years Ended June 30, 2019 through 2014

	2016	2015	2014
<b>Total pension liability</b>			
Service cost	\$ 3,577,188	\$ 5,957,132	\$ 5,383,133
Interest on the total pension liability	22,395,292	19,911,100	20,110,452
Difference between expected and actual experience	(5,400,812)	2,366,032	12,389,130
Assumption changes	42,122,612	(70,538,690)	-
Benefit payments	(21,841,237)	(21,274,949)	(20,800,502)
Refunds	(141,817)	(191,755)	(245,133)
Administrative expense	(382,340)	(394,695)	(334,628)
<b>Net change in total pension liability</b>	<u>40,328,886</u>	<u>(64,165,825)</u>	<u>16,502,452</u>
<b>Total pension liability - beginning</b>	<u>333,336,936</u>	<u>397,502,761</u>	<u>381,000,309</u>
<b>Total pension liability - ending (a)</b>	<u>\$373,665,822</u>	<u>\$333,336,936</u>	<u>\$397,502,761</u>
<b>Plan fiduciary net position</b>			
Contributions - employer	\$ 16,073,000	\$ 15,870,941	\$ 13,956,669
Contributions - participant	1,309,697	1,487,346	1,502,605
Net investment income	(539,494)	2,287,916	8,363,428
Benefit payments	(21,841,237)	(21,274,949)	(20,800,502)
Refunds	(141,817)	(191,755)	(245,133)
Administrative expense	(382,340)	(394,695)	(334,628)
<b>Net change in plan fiduciary net position</b>	<u>(5,522,191)</u>	<u>(2,215,196)</u>	<u>2,442,439</u>
<b>Plan fiduciary net position - beginning</b>	<u>54,574,264</u>	<u>56,789,460</u>	<u>54,347,021</u>
<b>Plan fiduciary net position - ending (b)</b>	<u>\$ 49,052,073</u>	<u>\$ 54,574,264</u>	<u>\$ 56,789,460</u>
<b>State's net pension liability - ending (a)-(b)</b>	<u>\$324,613,749</u>	<u>\$278,762,672</u>	<u>\$340,713,301</u>
<b>Plan fiduciary net position as a percentage of the total pension liability</b>	13.13%	16.37%	14.29%
<b>Covered payroll</b>	\$ 11,297,614	\$ 11,587,285	\$ 12,754,356
<b>State's net pension liability as a percentage of covered payroll</b>	2,873.29%	2,405.76%	2,671.35%

## REQUIRED SUPPLEMENTARY INFORMATION

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

Valuation Date: June 30, 2019

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.

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

#### 2019 Changes in Assumptions:

- The investment rate of return assumption decreased from 6.75% to 6.5%.
- The rate of inflation decreased from 2.5% to 2.25%.
- The salary increase assumption decreased from 2.75% to 2.5%.
- The mortality tables were updated to Pub-2010 Above-Median Income General Healthy Retiree and Employee Mortality Tables with adjustments for the System's credibility factors and future mortality improvements using scale MP-2018.
- The normal and early retirement rates were updated to better reflect observed experience.
- The turnover rates were updated to better reflect observed experience.

#### 2018 Changes in Assumptions:

- The rate of inflation decreased from 2.75% to 2.50%.
- The salary increase assumption was decreased to 2.75% from 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 7.00% to 6.75%.
- The salary increase assumption was decreased from 3.5% to 3.00%.
- Turnover rates were increased for both Tier 1 and Tier 2 members. For Tier 2 members with less than five years of service, the turnover rate was increased to a flat rate of 10%.
- The overall salary increase rates were decreased to better reflect observed experience.
- The overall normal retirement rates were increased to better reflect observed experience.
- 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.

#### 2015 Changes in Assumptions:

- Future members electing to participate in the System changed from 100% to 50%.

### SCHEDULE OF INVESTMENT RETURNS

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Annual money-weighted rate of return, net of investment expense	7.2%	7.5%	12.3%	0.3%	3.2%	18.1%

\* **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.



REQUIRED SUPPLEMENTARY INFORMATION

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
2010	\$ 12,064,078	\$ 10,411,274	\$ (1,652,804)	\$ 14,775,000	70.47%
2011	13,086,199	11,433,614	(1,652,585)	15,188,000	75.28%
2012	13,365,820	10,502,000	(2,863,820)	15,263,164	68.81%
2013	17,064,640	14,150,000	(2,914,640)	14,876,335	95.12%
2014	17,110,135	13,956,669	(3,153,466)	12,754,356	109.43%
2015	16,900,876	15,870,941	(1,029,935)	11,587,285	136.97%
2016	17,140,656	16,073,000	(1,067,656)	11,297,614	142.27%
2017	26,984,621	21,721,000	(5,263,621)	10,996,284	197.53%
2018	32,082,644	21,155,000	(10,927,644)	10,711,024	197.51%
2019	32,650,450	23,253,426	(9,397,024)	10,159,312	228.89%

Notes to Schedule of State Contributions:

Valuation Date: June 30, 2017

**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 20 year level percentage of capped payroll closed-period amortization of the unfunded accrued liability.

Remaining Amortization Period: 18 years, closed.

Asset Valuation Method: 5 year smoothed market

Inflation: 2.75%

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

Post Retirement Benefit: 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: 6.75%

Retirement Age: Experienced based table of rates that are specific to the type of eligibility

Mortality:

Post-retirement: RP-2014 White Collar Healthy Annuitant mortality table, sex distinct, and generational mortality improvements using the MP-2014 two-dimensional mortality improvement scales.

Pre-retirement: RP-2014 White Collar Total Employee mortality table, sex distinct, and generational mortality improvement using MP-2014 two-dimensional mortality improvement scales.

SUPPLEMENTARY FINANCIAL INFORMATION

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SUMMARY OF REVENUES BY SOURCE  
Year Ended June 30, 2019

	2019
Contributions:	
Participants:	
Participants	\$ 1,272,609
Interest paid by participants	<u>44,578</u>
Total participant contributions	<u>1,317,187</u>
Employer:	
General Revenue Fund	23,221,000
Paid by participants	<u>32,426</u>
Total employer contributions	<u>23,253,426</u>
Total contributions revenue	<u>24,570,613</u>
Investment income:	
Net appreciation/(depreciation) in fair value of investments	2,569,372
Interest and dividends from investments	881,479
Interest earned on cash balances	72,927
Less investment expense, other than from securities lending	<u>(74,362)</u>
Net investment income (loss)	<u>3,449,416</u>
Total revenues	<u><u>\$28,020,029</u></u>

SCHEDULE OF PAYMENTS TO CONSULTANTS  
Year Ended June 30, 2019

	2019
Actuary	\$ 76,531
Audit fees	35,015
Legal services	<u>1,201</u>
Total	<u><u>\$112,747</u></u>

SUPPLEMENTARY FINANCIAL INFORMATION

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SUMMARY SCHEDULE OF CASH RECEIPTS AND DISBURSEMENTS  
Year Ended June 30, 2019

	2019
Cash balance, beginning of year	\$ <u>4,718,266</u>
Receipts:	
Participant contributions	1,260,258
Employer contributions:	
General Revenue Fund	22,904,760
Paid by participants	32,426
Interest income on cash balances	74,834
Tax-deferred installment payments	3,576
Cancellation of annuities, net overpayments	8,663
Transfers from Illinois State Board of Investment	260,000
Miscellaneous	<u>150</u>
Total cash receipts	<u>24,544,667</u>
Disbursements:	
Benefit payments:	
Retirement annuities	20,590,349
Survivors' annuities	3,973,907
Refunds	169,134
Administrative expenses	<u>385,508</u>
Total cash disbursements	<u>25,118,898</u>
Cash balance, end of year	<u><u>\$ 4,144,035</u></u>

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

Honorable Frank J. Mautino  
Auditor General, State of Illinois

Board of Trustees  
General Assembly 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 Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position of the General Assembly Retirement System of the State of Illinois (System), as of and for the year ended June 30, 2019, 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 13, 2019. 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 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 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 13, 2019