Judges' Retirement System of Illinois

A Pension Trust Fund of the State of Illinois

Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2018

Judges' Retirement System of Illinois

2101 South Veterans Parkway, P. O. Box 19255
Springfield, Illinois 62794-9255
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Email: jrs@srs.illinois.gov

Fiscal Year 2018 Highlights

957	Total Membership
936	Active Contributing Members
$1,012,484,801	Net Position–Restricted for Pensions, fair value
	Contributions
$14,295,562	Participants
$135,962,000	Employer
$69,949,646	Net Investment Income
7.5%	Investment Return
	Benefit Recipients
871	Retirement Annuities
322	Survivors' Annuities
-	Temporary Disability
$148,146,938	Benefits Paid
$2,783,868,067	Total Pension Liability
$1,012,484,801	Fiduciary Net Position
$1,771,383,266	Net Pension Liability
36.37%	Funded Ratio

Mission Statement

To establish an efficient method of permitting retirement, without hardship or prejudice, of judges who are aged or otherwise incapacitated, by enabling them to accumulate reserves for themselves and their dependents for old age, disability, death and termination of employment.

This year's cover commemorates the bicentennial of the State of Illinois.

JUDGES'
RETIREMENT SYSTEM
OF ILLINOIS

A Pension Trust Fund of the State of Illinois

COMPREHENSIVE ANNUAL FINANCIAL REPORT
FOR THE FISCAL YEAR ENDED JUNE 30, 2018

JUDGES' RETIREMENT SYSTEM OF ILLINOIS

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

Prepared by the Accounting Division

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INTRODUCTORY SECTION

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December 14, 2018

The Board of Trustees and Members
Judges' Retirement System of Illinois
Springfield, IL 62794

Dear Board of Trustees and Members:

The comprehensive annual financial report (CAFR) of the Judges' Retirement System of Illinois (System) as of and for the fiscal year ended June 30, 2018 is hereby submitted. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with the System.

To the best of our knowledge and belief, the enclosed data are accurate in all material respects and are reported in a manner designed to present fairly the financial position and results of operations of the System. All disclosures necessary to enable the reader to gain an understanding of the System's financial activities have been included.

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

The report consists of six sections:

1. The Introductory Section contains this letter of transmittal, the identification of the administrative organization and the Certificate of Achievement for Excellence in Financial Reporting;

2. The Financial Section contains management's discussion and analysis, the report of the Independent Auditors, the financial statements of the System and certain required and other supplementary financial information;

3. The Investment Section contains a report on investment activity, investment policies, investment results and various investment schedules;

4. The Actuarial Section contains the Actuary's Certification Letter and the results of the annual actuarial valuation;

5. The Statistical Section contains significant statistical data; and

6. The Plan Summary and Legislative Section contains the System's plan provisions and current legislative changes.

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.

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 considered to be part of the State of Illinois financial reporting entity, and is to be combined and included in the State of Illinois' comprehensive annual financial report.

Although the Judges' Retirement System, State Employees' Retirement System and General Assembly Retirement System share a common administration, they are separate entities for legal and financial reporting purposes. Therefore, the financial statements of the Judges' Retirement System do not include fiduciary net position information nor the changes in fiduciary net position of the State Employees' Retirement System or General Assembly Retirement System.

PLAN HISTORY & SERVICES PROVIDED

The Judges' Retirement System was established as a single-employer public employee retirement system (PERS) by state statute on July 1, 1941. As of June 30, 1942, the end of the System's first fiscal year of operations, there were a total of 260 participants and the fiduciary net position valued at cost amounted to approximately $84,000. The fair value of the fiduciary net position at the end of fiscal year 2018 amounted to approximately $1,012.5 million, and there were 936 active participants.

The mission of the System as prescribed by state statute is to "establish an efficient method of permitting retirement, without hardship or prejudice, of judges who are aged or otherwise incapacitated, by enabling them to accumulate reserves for themselves and their dependents for old age, disability, death, and termination of employment."

INVESTMENTS

The System's investments are managed by the Illinois State Board of Investment (ISBI) pursuant to Chapter 40, Article 5/22A of the Illinois Compiled Statutes, using the "prudent person rule".

This rule states that fiduciaries shall discharge their duties solely in the interest of the fund participants and beneficiaries and with the degree of diligence, care and skill which prudent men and women would ordinarily exercise under similar circumstances in a like position.

The ISBI maintains a wide diversification of investments within this fund which is intended to reduce overall risk and increase returns. As further detailed in the Investment Section, the ISBI Commingled Fund had a gain of 7.6%, net of expenses, for the fiscal year ended June 30, 2018. Information regarding the Schedule of Fees and Commissions paid is included in the ISBI annual report.

FUNDING

Funding is the process of specifically allocating monies for current and future use. Proper funding includes an actuarial review of the fund balances to ensure that funds will be available for current and future benefit payments. The greater the level of funding, the larger the ratio of accumulated assets to the actuarial accrued liability and the greater the level of investment potential.

The funding plan for the System, enacted in 1994 with subsequent modifications, requires that state contributions be paid to the System so that by the end of fiscal year 2045, the ratio of the actuarial value of assets to the actuarial accrued liability will be 90%. For fiscal years 2011 through 2045, the required state contributions are to be computed as a level percentage of participant payroll.

For fiscal years up through 2010, the required state contributions, except for fiscal years 2006 and 2007, were to be increased incrementally as a percentage of the participant payroll so that by fiscal year 2011 the state was contributing at the required level contribution rate to achieve the financing objective by the end of fiscal year 2045. For fiscal year 2018, the statutorily required state contributions were $135,962,000 and the total amount of contributions received from the state for fiscal year 2018 was also $135,962,000.

The funding legislation also provides for the establishment of a continuing appropriation of the required state contributions to the System. This has, in effect, removed the appropriation of these funds from the annual budgetary process.

The actuarial determined liability of the System using the State's projected unit credit actuarial cost method for funding purposes at June 30, 2018, amounted to $2,721.9 million. The actuarial value of assets amounted to $1,012.8 million resulting in an unfunded accrued actuarial liability of $1,709.1 million as of the same date. The actuarial determined liability, actuarial value of assets, and unfunded accrued actuarial liability of the System as presented above and in the Actuarial Section of this report using the state's funding method does not conform with GASB Statement No. 67 and therefore, the amounts presented above and in the Actuarial Section of this report differ from the amounts presented for financial reporting purposes in the Financial Section of this report. A detailed discussion of funding is provided in the Actuarial Section of this report.

MAJOR EVENTS/INITIATIVES

During FY 2018, System staff continued to work on the modernization of several business processes through the application developed by the Information Technology Division. Significant progress was made on the development of the module to set up and track System receivables as well as the module that will allow for the request and tracking of optional service purchases. Additionally, through diligent staff efforts, the process by which initial retirement benefits are set up to be processed was coded. As FY 2019 begins, the benefit set up process will be reviewed, end-user tested, and ultimately placed into production. Likewise, the service purchase module and receivable modules will continue to be tested and developed through FY 19 and go into production in the later part of the fiscal year.

ACCOUNTING SYSTEM & INTERNAL CONTROL

This report has been prepared to conform with the principles of governmental accounting and reporting pronounced by the Governmental Accounting Standards Board and the American Institute of Certified Public Accountants.

The accrual basis of accounting is used to record the financial transactions and activities of the System. Revenues are recognized in the accounting period in which they are earned, without regard to the date of collection, and expenses are recognized when the corresponding liabilities are incurred, regardless of when payment is made.

The System also uses the State of Illinois, Statewide Accounting Management System (SAMS) as a basis for the preparation of the financial statements.

In developing the System's accounting system, consideration is given to the adequacy of internal accounting controls. These controls are designed to provide reasonable assurance regarding the safekeeping of assets and the reliability of financial records. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived and that the valuation of costs and benefits requires estimates and judgments by management. Constant effort is directed by the System at improving this level to assure the participants of a financially sound retirement system.

PROFESSIONAL SERVICES

Independent consultants are retained by the Board of Trustees to perform professional services that are essential to the effective and efficient operation of the System. Actuarial services are provided by Gabriel, Roeder, Smith & Company, Chicago, Illinois. The System's investment function is managed by the Illinois State Board of Investment.

The annual financial audit of the System was conducted by the accounting firm of RSM US LLP, under the direction of the Auditor General of the State of Illinois. In addition to the annual financial audit, a compliance attestation examination is also performed by the auditors.

The purpose of the compliance attestation examination was to determine whether the System obligated, expended, received and used public funds of the state in accordance with the purpose for which such funds have been authorized by law.

CERTIFICATE OF ACHIEVEMENT

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Judges' Retirement System of Illinois for its comprehensive annual financial report (CAFR) for the fiscal year ended June 30, 2017.

The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports. To be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized CAFR, whose contents meet or exceed program standards. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. The Judges' Retirement System of Illinois has received a Certificate of Achievement for the past twenty-nine consecutive years (fiscal years ended June 30, 1989 through June 30, 2017).

We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

ACKNOWLEDGMENTS & COMMENTS

The preparation of this report reflects the combined efforts of the System's staff under the direction of the Board of Trustees. It is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with legal provisions, and for determining responsible stewardship for the assets contributed by the members in the State of Illinois.

On behalf of the Board of Trustees, we would like to express our appreciation to the staff and professional consultants who worked so effectively to ensure the successful operation of the System.

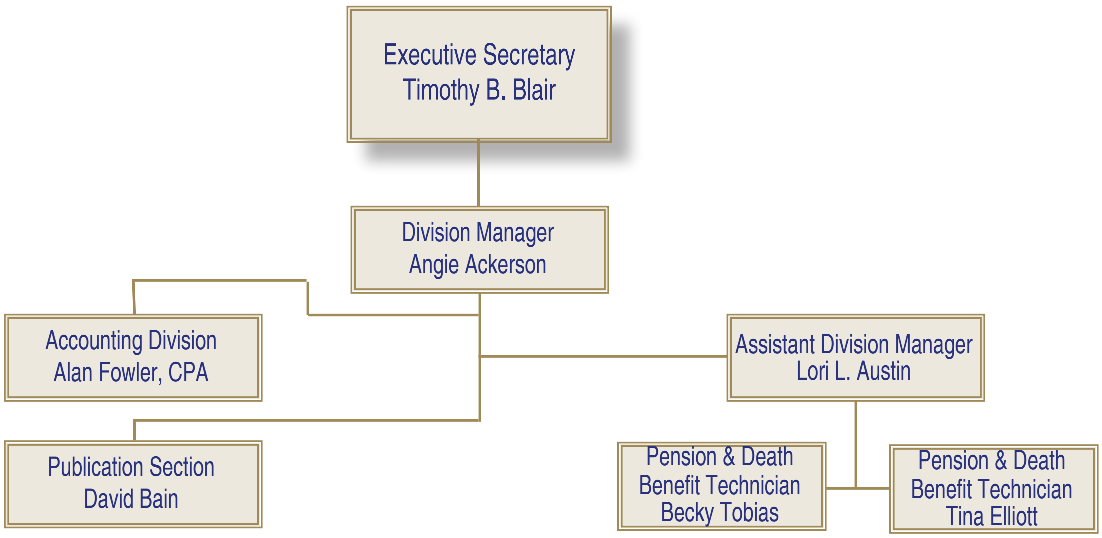
Respectfully submitted,

Timothy B. Blair
Executive Secretary

Alan T. Fowler, CPA
Chief Fiscal Officer

BOARD OF TRUSTEES

ADMINISTRATIVE STAFF



Advisors, Auditors, and Administrators

Consulting Actuary	Gabriel, Roeder, Smith & Company Chicago, Illinois
External Auditor	RSM US LLP Schaumburg, Illinois
Investments	Illinois State Board of Investment Chicago, Illinois

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Judges' Retirement System of Illinois

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2017

Christopher P. Morrill

Executive Director/CEO

FINANCIAL SECTION

RSM

Independent Auditor's Report

RSM US LLP

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

Board of Trustees, Judges' 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 Judges' Retirement System of the State of Illinois (System), as of June 30, 2018, and the Statement of Changes in 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 2018 financial statements of the Illinois State Board of Investment, an internal investment pool of the State of Illinois, which statements represent 95 percent, 97 percent and 32 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. 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, 2018, and the changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter
The actuarially determined pension liability, calculated as required by GASB 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 35 through 37. 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 the management's discussion and analysis on pages 14 through 16 and the required supplementary information as listed in the table of contents on pages 40 through 43 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, 2018 was conducted for the purpose of forming an opinion on the System's basic financial statements. The supplementary financial information in the financial section, as listed in the table of contents, and the accompanying introductory, investment, actuarial, statistical, and plan summary and legislative sections are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The supplementary financial information in the financial section, as listed in the table of contents, for the year ended June 30, 2018 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, 2018 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 in the financial section, as listed in the table of contents, is fairly stated, in all material respects, in relation to the basic financial statements as a whole for the year ended June 30, 2018.

The introductory, investment, actuarial, statistical and plan summary and legislative sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

RSM US LLP

Schaumburg, Illinois
December 14, 2018

This section presents management's discussion and analysis of the financial position and performance of the Judges' Retirement System of Illinois (System) for the year ended June 30, 2018. It is presented as a narrative overview and analysis. Readers are encouraged to consider the information presented here in conjunction with the Letter of Transmittal included in the Introductory Section of the Comprehensive Annual Financial Report.

The System is a defined benefit, single-employer public employee retirement system. It provides services to 936 active judges and 1,193 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, 2018, 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, 2018. This financial information also summarizes the changes in fiduciary net position restricted for pensions for the year then ended. The notes to the financial statements provide additional information that is essential to achieve a full understanding of the data provided in the basic financial statements.
2. Required Supplementary Information. The required supplementary information consists of three schedules and related notes concerning actuarial information, funded status, 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 $70.7 million during fiscal year 2018. The change was the result of a $3.3 million increase in cash, a $78.5 million increase in investments (excluding securities lending collateral) and a $11.2 million decrease in receivables during the fiscal year.
- The System was funded at 36.4% as of June 30, 2018.
- The overall rate of return for the Illinois State Board of Investment (ISBI) Commingled Fund was a gain of 7.6% for fiscal year 2018 and the System's annual money-weighted rate of return on its investment in the ISBI Commingled Fund was a gain of 7.5%.

Condensed Statements of Fiduciary Net Position
(in thousands)

	As of June 30, 2018	As of June 30, 2017	Increase/(Decrease) from 2017 to 2018
Cash	$ 28,938.2	$ 25,658.0	$ 3,280.2
Receivables	5,419.8	16,623.3	(11,203.5)
Investments, at fair value *	990,635.8	909,295.1	81,340.7
Capital Assets, net	70.5	55.8	14.7
Total assets	1,025,064.3	951,632.2	73,432.1
Liabilities *	12,579.5	9,828.7	2,750.8
Total fiduciary net position	$ 1,012,484.8	$ 941,803.5	$ 70,681.3

** Including securities lending collateral*

ADDITIONS TO FIDUCIARY NET POSITION

Additions to Fiduciary Net Position include employer and participant contributions and net income from investment activities. Participant contributions were approximately $14.3 million and $14.8 million for the years ended June 30, 2018 and June 30, 2017, respectively. Participant contribution rates are set by statute as a percentage of gross salary. For fiscal year 2018, employer contributions increased to approximately $136.0 million from $131.3 million in fiscal year 2017. These changes were 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 2018 and 2017, the System paid out approximately $148.6 million and $141.5 million in benefits and refunds, respectively. This increase of 5.0% from 2017 to 2018 is mainly the result of the annual scheduled 3% increase in retirement and other benefit payments. The administrative costs of the System represented less than 1% of the total deductions in each of the fiscal years presented within the condensed statements.

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

	For the Year Ended June 30, 2018	For the Year Ended June 30, 2017	Increase/(Decrease) from 2017 to 2018
Additions			
Participant contributions	$ 14,295.6	$ 14,770.4	$ (474.8)
Employer contributions	135,962.0	131,334.0	4,628.0
Net Investment income (loss)	69,949.6	97,796.5	(27,846.9)
Total additions	220,207.2	243,900.9	(23,693.7)
Deductions			
Benefits	148,146.9	140,497.2	7,649.7
Refunds	481.7	974.7	(493.0)
Administrative expenses	897.3	914.4	(17.1)
Total deductions	149,525.9	142,386.3	7,139.6
Net increase\(decrease) in fiduciary net position	$ 70,681.3	$ 101,514.6	$(30,833.3)

FUNDED RATIO

The funded ratio of the plan measures the ratio of the fiduciary net position against total pension liability as measured by the actuary 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 36.4% on June 30, 2018. The amount by which total pension liability exceeded the fiduciary net position was $1,771.4 million on June 30, 2018.

INVESTMENTS

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

The net investment income of the total ISBI Commingled Fund was approximately $1,331.5 million during fiscal year 2018, resulting in returns of 7.6%. The actual rate of return earned by the System will vary from the return earned on the total ISBI Commingled Fund as a 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, 2018, the ISBI Commingled Fund earned a compounded rate of return of 6.2%, 8.1%, and 6.0%, 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, 2018 were based on the experience review for the three years ended June 30, 2015, and the annual review of all economic assumptions. The state's statutory employer contribution for fiscal year 2019 will increase by $4.507 million, or 3.3%.

Tier 2 active members' annual earnings on which they can contribute were capped at $119,792 in 2018 and will be capped at $122,547 in 2019. 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.

JUDGES' RETIREMENT SYSTEM, STATE OF ILLINOIS

Statement of Fiduciary Net Position

June 30, 2018

Assets	
Cash	$ 28,938,179
Receivables:	
Employer contributions	5,215,000
Participants' contributions	92,465
Interest on cash balances	49,755
Due from General Assembly Retirement System	62,567
Total receivables	5,419,787
Investments:	
Investments - held in the Illinois State Board of Investment Commingled Fund at fair value	978,196,836
Securities lending collateral with State Treasurer	12,439,000
Total Investments	990,635,836
Capital Assets, net	70,481
Total Assets	1,025,064,283
Liabilities	
Benefits payable	17,290
Refunds payable	13,270
Administrative expenses payable	109,922
Securities lending collateral	12,439,000
Total Liabilities	12,579,482
Net position – restricted for pensions	$ 1,012,484,801

See accompanying notes to financial statements.

JUDGES' RETIREMENT SYSTEM, STATE OF ILLINOIS

Statement of Changes in Fiduciary Net Position
for the Year Ended June 30, 2018

Additions:	
Contributions:	
Participants	$ 14,295,562
Employer	135,962,000
Total contributions	150,257,562
Investment income:	
Net appreciation/(depreciation) in fair value of investments	49,815,053
Interest and dividends	21,459,864
Less investment expense, other than from securities lending	(1,421,235)
Net income (loss) from investing, other than from securities lending	69,853,682
Net securities lending income	95,964
Net investment income (loss)	69,949,646
Total Additions	220,207,208
Deductions:	
Benefits:	
Retirement annuities	122,966,147
Survivors' annuities	25,140,113
Temporary disability	40,678
Total benefits	148,146,938
Refunds of contributions	481,716
Administrative expenses	897,285
Total Deductions	149,525,939
Net increase/(decrease) in net postion	70,681,269
Net position - restricted for pensions:	
Beginning of year	941,803,532
End of year	$ 1,012,484,801

See accompanying notes to financial statements.

JUDGES' RETIREMENT SYSTEM OF ILLINOIS

Notes to Financial Statements June 30, 2018

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 Judges' Retirement System of Illinois (System) is administered by a Board of Trustees consisting of five persons, which include the State Treasurer, the Chief of the Supreme Court, ex officio, and three participating judges appointed by the Supreme Court. 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.

Pursuant to federal tax law and regulations governing the administration of public employee pension plans, the System has established a separate fund for the sole purpose of paying benefits in accordance with Section 415 of the Internal Revenue Code. The receipts and disbursements from the fund for fiscal year 2018 were each less than $1.8 million. Due to the immaterial nature of the separate fund, these receipts and disbursements have been included in the System's financial statements.

At June 30, 2018, the System membership consisted of:

	2018
Retirees and beneficiaries	
currently receiving benefits:	
Retirement annuities	871
Survivors' annuities	322
Temporary disability	-
	1,193
Inactive participants entitled to benefits	
but not yet receiving them	9
Total	1,202
Active participants:	
Vested	532
Nonvested	404
Total	936

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.

a. Eligibility and Membership

The Judges' Retirement System covers Judges, Associate Judges and, under certain conditions, the Administrative Director of the Illinois courts. Participation by Judges, either appointed or elected, is mandatory unless the Judge files an election not to participate within thirty days of receipt of notice of this option.

b. Contributions

In accordance with Chapter 40, Section 5/18-133 of the Illinois Compiled Statutes, participants contribute specified percentages of their salaries for retirement annuities, survivors' annuities, and annual increases. 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 rate is $119,792 for calendar year 2018. Contributions are excluded from gross income for Federal and State income tax purposes.

Participants who are eligible to receive the maximum rate of annuity may irrevocably elect to discontinue contributions and have their benefits "frozen" based upon the applicable salary in effect immediately prior to the effective date of such election.

Participants who have attained age 60 and are eligible to receive the maximum rate of annuity and have not elected to discontinue contributing to the System may irrevocably elect to have their contributions based only on the salary increases received on or after the effective date of such election rather than on the total salary received. The total contribution rate is 11% if the participants elect to contribute for their spouse and dependents as shown below:

7.5%	Retirement annuity
2.5%	Survivors' annuity
1.0%	Automatic annual increases
11.0%	

The statutes governing the Judges' 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 5/18 of the Illinois Compiled Statutes.

c. Benefits Retirement Annuity: Tier 1

Participants have vested rights to full retirement benefits beginning at age 60 with at least 10 years of credited service or reduced retirement benefits beginning at age 55. Participants also have vested rights to full retirement benefits at age 62 upon completing 6 years of credited service or at age 55 upon completing 26 years of credited service.

The retirement annuity provided is 3-1/2% for each of the first 10 years of service, plus 5% for each year of service in excess of 10, based upon the applicable final salary. 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 Judges' Retirement System also provides survivors' annuity benefits, temporary and/or total disability benefits and, under certain specified conditions, lump-sum death benefits.

Participants who terminate service and are not eligible for an immediate annuity may receive, upon application, a refund of their total contributions. Participants or annuitants who are not married are entitled to refunds of their contributions for survivors.

3. Summary of Significant Accounting Policies & Plan Asset Matters

a. Basis of Accounting

The financial transactions of the System are maintained and these financial statements have been prepared using the accrual basis of accounting in conformity with generally accepted accounting principles.

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. 75, "*Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*", addresses accounting and financial reporting for OPEB that is provided to the employees of state and local governmental employers. The statement establishes standards for recognizing and measuring liabilities, deferred outflows / deferred inflows of resources and expense/expenditures. In the case of defined benefit OPEB, the statement also identifies methods and assumptions that are required to be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. Note disclosures and required supplementary information about defined benefit OPEB are also addressed. This GASB is effective for fiscal years beginning after June 15, 2017 (FY 2018) and it has been determined that it will not impact the System's financial statements.

GASB Statement No. 82, "*Pension Issues – Amendment to GASB 67 & 68*", addresses the presentation of payroll related measures in the required supplementary information and the classification of payments made by employers to satisfy employee (plan member) contribution requirements. The System implemented this statement for the year ended June 30, 2017. The impact of implementation is reflected in the updated RSI schedules applicable to covered payroll.

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 plan net position or the changes in plan 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 are reported at fair value as follows: (1) U.S. Government and Agency, Foreign and Corporate

Obligations, Convertible Bonds – prices quoted by a major dealer in such securities; (2) Common Stock and Equity Funds, Foreign Preferred Stock, Foreign Equity Securities, Forward Foreign Currency Contracts and Options: (a) Listed – closing prices as reported on the composite summary of national securities exchanges; (b) Over-the-counter – bid prices; (3) Money Market Instruments – amortized cost; (4) Real Estate Investments – fair values based on audited financial statements of the funds and then adjusted by the ISBI and its investment managers for activity from audit date to fiscal year end; (5) Alternative Investments (Private Equity, Hedge Funds, Bank Loans, Opportunistic Debt and Infrastructure) – fair values based on audited financial statements of the funds and then adjusted by the ISBI and its investment managers for activity from audit date to fiscal year end; (6) Commingled Funds – fair values based on audited financial statements of the funds and then adjusted by the ISBI and its investment managers for activity from audit date to fiscal year end.

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

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

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, 2012 to June 30, 2015 resulting in the adoption of new assumptions as of June 30, 2016.

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 Judges' Retirement System and the General Assembly Retirement System are allocated 75% to the Judges' Retirement System and 25% to the General Assembly 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, 2018 was $236,908. The total administrative expenses attributable to the Judges' Retirement System was $897,285 for fiscal year 2018.

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.

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 5% of the net position of the ISBI commingled fund as of June 30, 2018. 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, 2018. 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, 2018
U.S. govt. and agency obligations	$ 3,772,996,557
Foreign obligations	317,071,356
Corporate obligations	978,155,830
Municipal bonds	8,911,164
Common stock & equity funds	5,227,218,322
Commingled funds	1,721,839,058
Foreign equity securities	2,301,280,852
Foreign preferred stock	8,763,970
Hedge funds	360,744,003
Opportunistic debt	225,053,335
Real estate funds	1,594,774,574
Private equity	706,768,270
Infrastructure	408,985,767
Bank loans	464,315,920
Foreign currency forward contracts	(7,847,062)
Money market instruments	231,743,812
Total investments	$ 18,320,775,728

Rate of Return

For the fiscal year ended June 30, 2018, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 7.5%. 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, 2018, the ISBI had a non-investment related bank balance of $903,541. A 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, 2018, the ISBI had an investment related bank balance of $13,382,746. This balance includes USD and foreign cash balances. As of January 1, 2013, cash held in the investment related bank account is neither 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 $2.1 billion at the end of fiscal year 2018. 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 2018, 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 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 judgement 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: Broker quote in an active market;
- Corporate 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: Average cost which approximates fair value;
- Derivative Instruments: valued using a market approach that considers foreign exchange rates.

The recurring fair value measurements for the year ended June 30, 2018 are as follows:

	At June 30, 2018 Fair Value Measurements Using			
	Level 1	Level 2	Level 3	Totals
Investments by fair value level				
Debt Securities				
Government and agency obligations	$ -	$ 3,772,996,557	$ -	$ 3,772,996,557
Municipal bonds	-	8,911,164	-	8,911,164
Foreign obligations	-	316,170,777	900,579	317,071,356
Corporate obligations	-	973,728,079	4,427,751	978,155,830
Bank loans	-	36,604,268	427,711,652	464,315,920
Total debt securities	$ -	$ 5,108,410,845	$ 433,039,982	$ 5,541,450,827
Equity Securities				
Common stock and equity funds	$ 5,226,061,569	$ 1,134,591	$ 22,162	$ 5,227,218,322
Foreign equity securities	2,297,170,419	3,662,373	448,060	2,301,280,852
Foreign preferred stocks	8,763,970	-	-	8,763,970
Total equity securities	$ 7,531,995,958	$ 4,796,964	$ 470,222	$ 7,537,263,144
Other				
Foreign currency forward contracts	$ (7,847,062)	$ -	$ -	$ (7,847,062)
Total other	$ (7,847,062)	$ -	$ -	$ (7,847,062)
Total investments by fair value level	$ 7,524,148,896	$ 5,113,207,809	$ 433,510,204	$ 13,070,866,909
Investments measured at the Net Asset Value (NAV)				
Commingled funds				$ 1,721,839,058
Real estate funds				1,594,774,574
Private equity				706,768,270
Infrastructure				408,985,767
Opportunistic debt				225,053,335
Hedge funds				360,744,003
Total investments measured at the NAV				$ 5,018,165,007
Investments not measured at fair value				
Money market instruments				$ 231,743,812
Total investments				$ 18,320,775,728

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

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

	June 30, 2018			
	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Commingled funds	$ 1,721,839,058	-	Quarterly	90 Days
Real estate funds	1,594,774,574	$ 713.3 million	Quarterly	90 Days
Private equity	706,768,270	707.6 million	N/A	N/A
Opportunistic debt	225,053,335	660.1 million	N/A	N/A
Hedge funds	360,744,003	-	Quarterly	90 Days
Infrastructure	408,985,767	23.5 million	Quarterly	90 Days
Total Investments measured at the NAV	$ 5,018,165,007			

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 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 six diversified funds focusing on emerging markets and six 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, 2018. It is 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 on public exchanges. Investment strategies consist of investments in sixty-five 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, growth capital and mezzanine capital. Returns are commensurate with the risks presented by this asset class which include illiquidity and lack of standard historical evaluation data. 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, 2018. It is 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 eighteen funds including hedge fund and long only

equity assets. Returns are commensurate with the risks presented by this asset class which include illiquidity and lack of standard historical evaluation data. 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, 2018, for the majority of the hedge fund investments, the ISBI has plans to transition out entirely or to long only equity assets. It is 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 part of 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 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, 2018. It is 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 – The ISBI's assets in this category consist of investments in private fixed income markets. Investment strategies consist of investments in seventeen 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, 2018. It is 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 thirty-six 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, 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, 2018. It is probable that any investments sold will be sold at an amount different from the current NAV of the plan's ownership interest.

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, 2018, real estate equities of approximately $1,595 million are reported at estimated fair value. Of this amount, $1,679 million is net assets and $84 million is long term debt.

Required repayment of real estate debt, which is non-recourse debt, is as follows as of June 30, 2018:

Debt Maturities Year Ending June 30	2018
2019	$ 25,492,500
2020	57,963,872
	$ 83,456,372

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, 2018, there were no investments that were uninsured and unregistered securities held by the counterparty or by its trust department or agent but not in the ISBI's name.

Interest Rate Risk

The ISBI manages its exposure to fair value losses arising from interest rate risk by diversifying the debt securities portfolio and maintaining the debt securities portfolio to an effective weighted duration consistent with the Barclay's U.S. Universal Index (benchmark index). As of June 30, 2018, the effective weighted duration of the ISBI's fixed income portfolio was 6.7 years and the effective duration of the benchmark index was 5.8 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, 2018:

Investment Type	Fair Value	Effective Weighted Duration Years
U.S. Govt. and Agency Obligations		
U.S. Government	$ 3,051,823,420	8.4
Federal Agency	721,173,138	5.4
Municipal Obligations	8,911,164	10.7
Foreign Obligations	317,071,356	5.3
Corporate Obligations		
Bank & Finance	306,945,996	3.3
Industrial	92,423,482	5.7
Other	578,786,351	5.1
Total	$ 5,077,134,907	

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, 2018, the weighted average maturity of ISBI's bank loan portfolio was 5.1 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 have one issuer investment that exceeded 5% of the total investments of the fund as of June 30, 2018. This security was U.S. Treasury Notes/Bills with a Moody's rating of Aaa. This investment represented 7.0% of the total investments of the fund. The table below and continued on the next page, presents the quality ratings of debt securities held by the ISBI as of June 30, 2018.

	Moody's Quality Rating	
U.S. Government and Agency Obligations		
	AAA	$ 3,763,976,416
	Not Rated	9,020,142
Total U.S. Government and Agency Obligations		$ 3,772,996,557
Municipal Obligations		
	AAA	$ 838,626
	AA	1,511,700
	A	1,269,124
	CA	19,320
	Not Rated	5,272,393
Total Municipal Obligations		$ 8,911,164
Foreign Obligations		
	AAA	$ 41,977,946
	AA	27,460,930
	A	54,344,245
	BAA	59,881,915
	BA	27,877,269
	B	47,658,967
	CAA	19,185,346
	CA	740,870
	C	487,825
	Not rated	37,456,043
Total Foreign Obligations		$ 317,071,356

		Moody's Quality Rating		
Corporate Obligations				
	Bank and Finance			
		AAA	$	30,463,803
		AA		1,918,280
		A		186,631,850
		BAA		40,936,878
		BA		17,326,045
		B		10,584,845
		CAA		1,040,188
		C		192,675
		Not Rated		17,851,432
	Total Bank and Finance		$	306,945,996
	Industrial			
		AAA	$	170,856
		AA		55,479
		A		16,784,165
		BAA		22,770,802
		BA		7,207,064
		B		27,952,272
		CAA		10,735,935
		Not Rated		6,746,912
	Total Industrial		$	92,423,482
	Other			
		AAA	$	12,892,695
		AA		39,432,846
		A		131,626,425
		BAA		140,301,493
		BA		56,287,806
		B		117,871,856
		CAA		52,532,525
		CA		761,400
		C		546,904
		Not Rated		26,532,402
	Total Other		$	578,786,352
Total Corporate Obligations			$	978,155,830
Total Bank Loans		Not Rated	$	464,315,920
Total Money Market		Not Rated	$	231,743,812

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 $120,121,360 as of June 30, 2018. The table below presents the foreign currency risk by type of investment as of June 30, 2018.

	2018	
Currency	Foreign Equity Securities & Foreign Preferred Stock	Foreign Obligations
Australian Dollar	$ 140,703,692	$ -
Brazilian Real	2,328,245	-
Canadian Dollar	34,869,856	-
Danish Krone	34,178,475	-
English Pound Sterling	379,925,049	-
Euro Currency	697,623,140	-
Hong Kong Dollar	81,794,995	-
Japanese Yen	563,029,069	-
Mexican Peso	2,758,008	-
New Israeli Sheqel	9,802,812	-
Norwegian Krone	23,598,464	-
Singapore Dollar	26,008,370	-
South African Rand	5,241	-
South Korean Won	15,771,428	-
Swedish Krona	65,000,505	-
Swiss Franc	167,379,349	-
Thailand Baht	3,152,176	-
UAE Dirham	464,120	-
Foreign investments denominated in U.S. Dollars	61,651,828	317,071,356
Total	$ 2,310,044,822	$ 317,071,356

Securities Lending

The ISBI participated in a securities lending program with Deutsche Bank AG, New York Branch as of June 30, 2018 who acts as securities lending agent. The ISBI is in the process of winding down this program and therefore, as of June 30, 2018 there were no outstanding loans or balances associated with any of the related financial statement accounts on the Statement of Net Position. Public markets securities are loaned to brokers and, in return, the ISBI receives cash and non-cash collateral. All of the public market securities were eligible for the securities lending program. Collateral consists solely of cash, government securities and certain equity securities having a fair value equal to or exceeding 102% of the value of the loaned securities (105% for non-U.S. securities). In the event of borrower default, Deutsche Bank AG, New York Branch provides the ISBI with counterparty default indemnification. Investments in the cash collateral account represent securities that were distributed to the ISBI in connection with the in-kind redemption of the ISBI's ownership in the State Street Bank and Trust Company Quality Funds for Short-Term Investment (Quality D). Deutsche Bank is not responsible for any losses with regards to these legacy investments. This arrangement subjects the ISBI to credit risk as the credit quality of these investments may decline over time. The credit risk on the legacy investments is the risk of a possible loss arising from the inability of counterparty to meet its obligations. This loss could include the loss of principal, interest and/or decreased expected cash flows in any of the investments held in the ISBI's cash collateral account. In the event counterparty defaults on its obligations, the ISBI would need to credit the cash collateral account with the amount of the default to make the account whole so that once loaned securities are returned, the cash pledged by borrowers can be returned to them.

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 2018, Deutsche Bank AG lent U.S. Agency securities and U.S. Treasury securities and received as collateral U.S. dollar denominated cash. Borrowers were required to deliver collateral for each loan equal to at least 100% of the aggregate fair value of the loaned securities. Loans are marked to market daily. If the fair value of collateral falls below 100%, the borrower must provide additional collateral to raise the fair value to 100%.

The State Treasurer did not impose any restrictions during fiscal year 2018 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 2018 resulting from a default of the borrowers or Deutsche Bank AG.

During fiscal year 2018, 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, 2018 were $4,521,091,000 and $4,451,198,793, respectively. The System's portion of securities lending collateral that was invested in repurchase agreements as of June 30, 2018 was $12,439,000.

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.

Foreign currency forward contracts (FX forwards) are used to protect against the currency risk in the ISBI's foreign equity portfolio. A foreign currency forward contract is an agreement to buy or sell a specific amount of a foreign currency at a specified delivery or maturity date for an agreed-upon price. Fluctuations in the market value of foreign currency forward contracts are marked to market on a daily basis. These investments are reported at fair value in the investment section of the ISBI's Statement of Net Position. The gain or loss arising from the difference between the original contracts and the closing of such contracts is recognized in the net increase/decrease in the fair value of investments in the ISBI's Statement of Changes in Net Position. As of June 30, 2018, all foreign currency forward contracts are held by the ISBI's custodian and one investment manager, Northern Trust Asset Management, which is permitted per the investment guidelines to invest in this type of contract under established guidelines.

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

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

Rights and warrants allow the ISBI'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.

The fair values of the forward contracts are estimated based on the present value of their estimated future cash flows. 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, 2018.

	Changes in Fair Value	Fair Value at Year End	Notional Amount Number of Shares
	2018	2018	2018
FX Forwards	$ 3,646,386	$ (7,847,062)	-
Futures	-	-	276
Rights/Warrants	50,984	181,512	435,088
	$ 3,697,370	$ (7,665,550)	435,364

The table below shows the futures positions held by the ISBI as of June 30, 2018.

	2018	
	Number of Contracts	Contract Principal*
Equity Futures Purchased	263	$29,211,622
Fixed Income Futures Purchased	-	-
Fixed Income Futures Sold	13	(1,562,438)

** Contract principal amounts shown represent the fair value of the underlying assets the contracts control. These are shown to present the volume of the transactions but do not reflect the extent to which positions may offset one another. These amounts do not represent the much smaller amounts potentially subject to risk. Contract principal values also do not represent actual recorded values reported in the ISBI's Statement of Net Position.*

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. As of June 30, 2018, the ISBI held futures contracts whose underlying instruments were exposed to interest risk but there were no GASB 53 reportable elements. The ISBI has not adopted a formal policy specific to master netting arrangements.

The following table presents the fair value of derivative investments exposed to foreign currency risk as of June 30, 2018:

	2018	
Currency	FX Forwards	Rights
Australian Dollar	$ (794,928)	$ 2,265
English Pound Sterling	(1,706,100)	76,108
Euro Currency	(2,533,864)	103,139
Japanese Yen	(2,812,170)	-
	$ (7,847,062)	$ 181,512

The ISBI's derivative investments in foreign currency forward contracts are held with counterparties. The counterparties were not rated and the fair value and net exposure as of June 30, 2018 for these contracts were $0.

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 2018, the actuary used the projected unit credit actuarial method for determining the proper employer contribution amount.

For fiscal year 2018, 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 2018 was $135,962,000. The total amount of employer contributions received from the state during fiscal year 2018 was $135,962,000.

6. Net Pension Liability of the State

The components of the State's net pension liability for this plan at June 30, 2018 are as follows:

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

Total Pension Liability (TPL)	Plan Fiduciary Net Position (FNP)	Net Pension Liability	Plan FNP as % of TPL
$2,783,868,067	$1,012,484,801	$1,771,383,266	36.37%

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of June 30, 2018, using the following actuarial assumptions, which were based on the results of an actuarial experience study for the period from July 1, 2012 to June 30, 2015:

Actuarial Cost Method: Entry-Age Normal

Mortality rates:

Post retirement: RP-2014 White Collar Total Healthy Annuitant mortality table, sex distinct, with rates set forward one (1) year for males and set back one (1) year for females and generational mortality improvements using MP-2014 two-dimensional mortality improvement scales recently released by the Society of Actuaries (SOA).

Pre-retirement: RP-2014 White Collar Total Employee mortality table, sex distinct and generational mortality improvements using MP-2014 two-dimensional mortality improvement scales recently released by the SOA, to reflect that experience shows active members having lower mortality rates than retirees of the same age.

Inflation: 2.5%, compounded annually

Investment rate of return: 6.75% per year, compounded annually

Salary increases: 2.75% per year (consisting of an inflation component of 2.5% per year, a productivity / merit / promotion component of 0.25% per year).

Group size growth rate: 0.0%

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 was determined based on an analysis performed by the System's actuary, Gabriel Roeder Smith and Company (GRS), during their annual review of economic actuarial assumptions, with data provided by the Illinois State Board of Investments (ISBI) in conjunction with its investment consultant. The annualized geometric return for each major asset class were combined to produce the long-term expected rate of return by weighting the expected future returns by the target asset allocation percentage and factoring in the impact of each asset classes correlation relative to other assets and finally, by adding expected inflation. For each major asset class that is included in the pension plan's target asset allocation as of June 30, 2018, the 20-year simulated real rates of return are summarized in the following table:

	Asset Allocation	
Asset Class	Target Allocation	20 Year Simulated Real Rate of Return
U.S. Equity	23.0%	5.5%
Developed Foreign Equity	13.0%	5.3%
Emerging Market Equity	8.0%	7.8%
Private Equity	7.0%	7.6%
Intermediate Investment Grade Bonds	14.0%	1.5%
Long-term Government Bonds	4.0%	1.8%
TIPS	4.0%	1.5%
High Yield and Bank Loans	5.0%	3.8%
Opportunistic Debt	8.0%	5.0%
Emerging Market Debt	2.0%	3.7%
Core Real Estate	5.5%	3.7%
Non Core Real Estate	4.5%	5.9%
Infrastructure	2.0%	5.8%
Total	100%	

Discount Rate

A single discount rate of 6.60% was used to measure the total pension liability as of June 30, 2018. This represents an increase of 0.02% from the discount rate used for the June 30, 2017 valuation, 6.58%.

The single discount rate was based on an expected rate of return on pension plan investments of 6.75% and a municipal bond rate of 3.62% as of June 30, 2018. 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 2063 at June 30, 2018. As a result, for fiscal year 2018, the long-term expected rate of return on pension plan investments was applied to projected benefit payments through 2063, and the municipal bond rate was applied to all benefit payments after that date.

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

For fiscal year 2018, the following table presents the plan's net pension liability using a single discount rate of 6.60%, 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, 2018		
	1% decrease 5.60%	Current Discount Rate 6.60%	1% increase 7.60%
State's net pension liability	$ 2,095,210,163	$ 1,771,383,266	$ 1,498,870,169

7. Administrative Expenses

A summary of the administrative expenses for the Judges' Retirement System for fiscal year 2018 are listed below.

	2018
Personal services	$392,613
Employee retirement contributions paid by employer	3,872
Employer retirement contributions	185,773
Social security contributions	28,889
Group insurance	76,153
Contractual services	166,571
Travel	7,733
Printing	252
Commodities	64
Telecommunications	1,046
Information technology	47,859
Automotive	908
Depreciation/amortization	6,132
Change in accrued compensated absences	(20,807)
Interest on lease obligation	227
Total	$897,285

8. Compensated Absences

Employees of the Judges' 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 as of June 30, 2018 total $22,804 and are included in administrative expenses payable.

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 2018 is included in the State of Illinois' Comprehensive Annual Financial Report (CAFR) for the year ended June 30, 2018. 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 Employee's 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 departments or funds for annuitants and their dependents and active employees and their dependents.

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

10. 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 2018 is as follows:

	2018			
	Beginning Balance	Additions	Deletions	Ending Balance
Equipment	$ 34,982	$ -	$ (73)	$ 34,909
Accumulated depreciation	(31,443)	(2,167)	73	(33,537)
Internally developed software	58,509	20,773	-	79,282
Accumulated amortization	(6,209)	(3,964)	-	(10,173)
Capital Assets, net	$ 55,839	$ 14,642	$ -	$ 70,481

SCHEDULE OF CHANGES IN THE STATE'S NET PENSION LIABILITY AND RELATED RATIOS

Fiscal Years Ended June 30, 2018 through 2014

	2018	2017
Total pension liability		
Service cost	$ 53,221,872	$ 56,166,214
Interest on the total pension liability	175,399,302	168,163,770
Difference between expected and actual experience	6,190,925	23,042,316
Assumption changes	(14,445,948)	(29,511,474)
Benefit payments	(148,146,938)	(140,497,204)
Refunds	(481,716)	(974,665)
Administrative expense	(897,285)	(914,405)
Net change in total pension liability	70,840,212	75,474,552
Total pension liability - beginning	2,713,027,855	2,637,553,303
Total pension liability - ending (a)	$2,783,868,067	$2,713,027,855
Plan fiduciary net position		
Contributions - employer	$ 135,962,000	$ 131,334,000
Contributions - participant	14,295,562	14,770,467
Net investment income	69,949,646	97,796,479
Benefit payments	(148,146,938)	(140,497,204)
Refunds	(481,716)	(974,665)
Administrative expense	(897,285)	(914,405)
Net change in plan fiduciary net position	70,681,269	101,514,672
Plan fiduciary net position - beginning	941,803,532	840,288,860
Plan fiduciary net position - ending (b)	$1,012,484,801	$ 941,803,532
State's net pension liability - ending (a)-(b)	$1,771,383,266	$1,771,224,323
Plan fiduciary net position as a percentage of the total pension liability	36.37%	34.71%
Covered payroll	$ 132,064,855	$ 139,737,508
State's net pension liability as a percentage of covered payroll	1,341.30%	1,267.54%

SCHEDULE OF CHANGES IN THE STATE'S NET PENSION LIABILITY AND RELATED RATIOS
Fiscal Years Ended June 30, 2018 through 2014

	2016	2015	2014
Total pension liability			
Service cost	$ 58,041,274	$ 59,619,744	$ 57,138,961
Interest on the total pension liability	158,611,299	151,431,750	145,993,903
Difference between expected and actual experience	(3,260,012)	28,713,856	4,490,010
Assumption changes	205,404,829	9,482,302	-
Benefit payments	(132,571,796)	(125,654,349)	(118,590,965)
Refunds	(658,051)	(945,807)	(687,923)
Administrative expense	(942,950)	(982,656)	(831,652)
Net change in total pension liability	284,624,593	121,664,840	87,512,334
Total pension liability - beginning	2,352,928,710	2,231,263,870	2,143,751,536
Total pension liability - ending (a)	$2,637,553,303	$ 2,352,928,710	$ 2,231,263,870
Plan fiduciary net position			
Contributions - employer	$ 132,060,000	$ 134,039,684	$ 126,815,881
Contributions - participant	14,962,055	15,431,105	15,918,732
Net investment income	(6,470,553)	36,009,150	110,058,987
Benefit payments	(132,571,796)	(125,654,349)	(118,590,965)
Refunds	(658,051)	(945,807)	(687,923)
Administrative expense	(942,950)	(982,656)	(831,652)
Net change in plan fiduciary net position	6,378,705	57,897,127	132,683,060
Plan fiduciary net position - beginning	833,910,155	776,013,028	643,329,968
Plan fiduciary net position - ending (b)	$ 840,288,860	$ 833,910,155	$ 776,013,028
State's net pension liability - ending (a)-(b)	$1,797,264,443	$ 1,519,018,555	$ 1,455,250,842
Plan fiduciary net position as a percentage of the total pension liability	31.86%	35.44%	34.78%
Covered payroll	$ 139,537,967	$ 145,903,074	$ 150,280,023
State's net pension liability as a percentage of covered payroll	1,288.01%	1,041.11%	968.36%

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

Valuation Date: June 30, 2018

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

2018 Changes in Assumptions:

- The rate of inflation decreased from 2.75% to 2.5%.
- The salary increase assumption decreased from 3.00% to 2.75%.

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 changed from 3.75% to 3.00% per year, compounded annually. That rate includes a 0.25% per year productive/merit/promotion component.
- 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 1.75%.
- The overall normal retirement rates were decreased 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:

- There were no significant assumption changes.

SCHEDULE OF INVESTMENT RETURNS

	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expense	7.5%	12.4%	(0.6)%	5.1%	17.5%

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

SCHEDULE OF STATE CONTRIBUTIONS

Fiscal Year Ended June 30	Actuarially determined contribution	Contributions received	Contribution (deficiency) excess	Covered Payroll	Contributions received as a percentage of covered payroll
2009	$78,386,597	$59,983,000	$(18,403,597)	$155,645,000	38.54%
2010	86,916,418	78,509,810	(8,406,608)	161,164,000	48.71%
2011	95,490,182	62,694,460	(32,795,722)	169,155,000	37.06%
2012	110,923,357	63,644,099	(47,279,258)	153,550,766	41.45%
2013	125,576,795	88,239,564	(37,337,231)	156,142,183	56.51%
2014	125,061,595	126,815,881	1,754,286	150,280,023	84.39%
2015	124,215,990	134,039,684	9,823,694	145,903,074	91.87%
2016	121,362,703	132,060,000	10,697,297	139,537,967	94.64%
2017	152,699,188	131,334,000	(21,365,188)	139,737,508	93.99%
2018	168,056,916	135,962,000	(32,094,916)	132,064,855	102.95%

Notes to Schedule of State Contributions

Valuation Date: June 30, 2016

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 Used to Determine Contribution Rates as of the Valuation Date

Actuarial Cost Method: Projected Unit Credit

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

Remaining Amortization Period: 25 years, closed.

Asset Valuation Method: 5 year smoothed market

Inflation: 2.75%

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

Post Retirement Benefits: Post-retirement benefit increases of 3.00%, compounded, for Tier 1 and 3.00% or the annual change 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 condition

Mortality:

Post-retirement: RP-2014 White Collar Healthy Annuitant mortality table, sex distinct, with rates set forward one year for males and set back one year for females 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.

SUMMARY OF REVENUES BY SOURCE
Year Ended June 30, 2018

	2018
Contributions:	
Participants:	
Participants	$ 14,266,695
Interest paid by participants	28,867
Repayment of refunds	-
Total participant contributions	14,295,562
Employer:	
General Revenue Fund	135,962,000
Paid by participants	-
Total employer contributions	135,962,000
Total contributions revenue	150,257,562
Investment income:	
Net appreciation/(depreciation) in fair value of investments	49,815,053
Interest and dividends from investments	20,954,935
Interest earned on cash balances	504,929
Less investment expense, other than from securities lending	(1,421,235)
Net income (loss) from investing, other than from securities lending	69,853,682
Net securities lending income	95,964
Net investment income (loss)	69,949,646
Total revenues	$ 220,207,208

SCHEDULE OF PAYMENTS TO CONSULTANTS
Year Ended June 30, 2018

	2018
Actuary	$ 56,440
Audit fees	31,137
Legal services	450
Total	$ 88,027

SUMMARY SCHEDULE OF CASH RECEIPTS AND DISBURSEMENTS
Year Ended June 30, 2018

	2018
Cash balance, beginning of year	$ 25,657,962
Receipts:	
Participant contributions	14,308,340
Employer contributions:	
General Revenue Fund	147,163,750
Paid by participants	-
Interest income on cash balances	484,683
Reimbursements from General Assembly Retirement System	232,536
Cancellation of annuities, net of overpayments	57,018
Cancellation of refunds	-
Tax-deferred installment payments	-
Repayment of refunds	-
Transfers from Illinois State Board of Investment	2,500,000
Miscellaneous	200
Total cash receipts	164,746,527
Disbursements:	
Benefit payments:	
Retirement annuities	122,986,342
Survivors' annuities	25,140,028
Temporary disability	40,678
Refunds	521,424
Transfers to Illinois State Board of Investment	11,600,000
Administrative expenses	1,177,838
Total cash disbursements	161,466,310
Cash balance, end of year	$ 28,938,179

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INVESTMENT SECTION

INVESTMENT REPORT

By state law, the System's investment function is managed by the Illinois State Board of Investment (ISBI). The ISBI was created in 1969 to provide a means of centralizing the investment management function for public employee pension funds and retirement systems operating in the state.

In addition to the assets of the Judges' Retirement System, the ISBI also manages the investment function for the State Employees' Retirement System, General Assembly Retirement System, and one other state agency. All ISBI investments are accounted for in a commingled fund (ISBI Fund).

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.

As of June 30, 2018, the ISBI's total net position under management, valued at market, amounted to $18.3 billion. Of the total market value of the net position under management, $978.2 million or approximately 5% represented assets of the Judges' Retirement System as of June 30, 2018.

The investment authority of the ISBI is provided in Chapter 40, Section 5/22A of the Illinois Compiled Statutes (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.

A summary of the portfolio's largest holdings, as well as the complete listing of the ISBI portfolio, are included in the ISBI Annual Report. A schedule of fees and commissions paid by brokerage firms and a listing of transactions executed, including transaction value, are also contained in the ISBI Annual Report. A copy of the ISBI Annual Report can be obtained from the ISBI at 180 North LaSalle Street, Suite 2015, Chicago, Illinois 60601 or by visiting the ISBI's website at www.ISBI.Illinois.gov.

The following investment information and analysis has been prepared from information provided by the ISBI. Investment performance returns are prepared by Northern Trust. Investment activities are presented on a trade date basis and measurements are calculated using time weighted rates of return consistent with investment industry standards.

INVESTMENT POLICY AND ASSET ALLOCATION

The ISBI operates under a strategic investment policy. The investment objective of the total portfolio is to maximize the rate of return on investments within a prudent level of risk. To achieve this objective, the ISBI invests in different types of assets and uses multiple managers to ensure diversification.

The investment policy of the ISBI establishes asset allocation targets and ranges for each asset class, selected to achieve overall risk and return objectives. This policy is implemented by allocations to investment managers with assignments to invest in specific asset classes, with defined security selection styles and methodologies.

Changes made to the portfolio during fiscal year 2018 amounted to routine adjustments associated with the administration of an institutional portfolio – periodic rebalancing, funding of private equity and real estate commitments, selection of new limited partnerships, and continual monitoring of the portfolio.

The portfolio is regularly adjusted to manage exposures and to closely track the asset allocation policy adopted by the ISBI Board. The asset allocation policy target and actual allocation for fiscal year 2018 are shown in the following table.

INVESTMENT ASSET ALLOCATION

	Fair Value	2018 Actual Asset Mix	Policy Target
U.S. equity	$ 5,227,218,322	28%	23%
U.S. equity hedge funds	360,744,003	2	0
International equity	2,310,044,822	13	21
Commingled funds[4]	1,721,839,058	9	0
Fixed income[1]	5,077,134,906	28	26
Bank loans	464,315,921	3	3
Real estate	1,594,774,575	9	10
Private equity [2]	706,768,270	4	7
Infrastructure [2]	408,985,767	2	2
Opportunistic Debt	225,053,335	1	8
Cash[3]	239,555,471	1	0
Total	$ 18,336,434,449	100%	100%

1 Maturities of one year or longer, including convertible bonds.
2 Interests in limited partnerships and other entities which have limited liquidity.
3 Includes money market instruments and other assets, less liabilities.
4 Holdings include fixed income and equity investments.

INVESTMENT PORTFOLIO SUMMARY

	June 30, 2018	
Investments, at fair value		
U.S. Govt. and Agency Obligations	$ 3,772,996,557	20.58%
Foreign Obligations	317,071,356	1.73%
Corporate Obligations	978,155,830	5.33%
Municipal Bonds	8,911,164	0.05%
Common Stock & Equity Funds	5,227,218,322	28.51%
Commingled Funds	1,721,839,058	9.39%
Foreign Equity Securities	2,301,280,852	12.55%
Foreign Preferred Stock	8,763,970	0.05%
Hedge Funds	360,744,003	1.97%
Opportunistic Debt	225,053,335	1.23%
Real Estate Funds	1,594,774,574	8.70%
Private Equity	706,768,270	3.85%
Money Market Instruments	231,743,812	1.26%
Real Assets	408,985,767	2.23%
Bank Loans	464,315,920	2.53%
Foreign Currency Forward Contracts	(7,847,062)	(0.04)%
	18,320,775,728	99.91%
Other Assets, Less Liabilities	15,658,721	0.09%
Net Position, at Fair Value	$ 18,336,434,449	100.00%

ADDITIONAL INVESTMENT INFORMATION

The following table shows a comparison of ISBI investment operations of the System for fiscal years 2018 and 2017:

	2018	2017	Increase/(Decrease) Amount	Percentage
Balance at beginning of year, at fair value	$ 899,652,119	$ 785,176,162	$114,475,957	14.6%
Cash transferred to (from) ISBI, net	9,100,000	17,000,000	(7,900,000)	(46.5)%
Net ISBI investment revenue:				
Net appreciation/(depreciation) in fair value of investments	49,815,053	77,594,390	(27,779,337)	(35.8)%
Interest and dividends	20,954,935	21,394,262	(439,327)	(2.1)%
Less investment expense, other than from securities lending	(1,421,235)	(1,558,941)	137,706	8.8%
Net income from investing, other than from securities lending	69,348,753	97,429,711	(28,080,958)	(28.8)%
Net securities lending income	95,964	46,246	49,718	107.5%
Net ISBI investment revenue	69,444,717	97,475,957	(28,031,240)	(28.8)%
Balance at end of year, at fair value	$ 978,196,836	$ 899,652,119	$ 78,544,717	8.7%

In addition, interest on the average balance in the System's cash account in the State Treasury for fiscal year 2018 was $504,929 compared to $320,522 during fiscal year 2017.

MANAGEMENT EXPENSES

The ISBI's total expenses for fiscal year 2018, based on $18.3 billion in net position, were $27.2 million. The resulting expense ratio (expenses divided by average fair value of assets) for fiscal year 2018 was 0.15%. As a result of the ISBI's commitment to control costs, the investment management fees are typically in the bottom quartile of fees paid by the ISBI's peer group.

ANALYSIS OF INVESTMENT PERFORMANCE

In fiscal year 2018, investors enjoyed gains in international and U.S. equities as measured by the market indices. The ISBI's total fund was up 7.6% for fiscal year 2018, net of all expenses. This follows a positive return of 12.3% in 2017 after having experienced a negative return of 0.8% in fiscal year 2016. Positive returns of 4.7% and 17.9% occurred during fiscal years 2015 and 2014, respectively.

The ISBI staff, as well as its retained consultants, aggressively monitors the totality of the portfolio.

The following table reflects the investment performance over the last five years as well as the three, five, and ten year average returns for all categories in addition to their individual benchmarks.

ANALYSIS OF INVESTMENT PERFORMANCE

	2018	2017	2016	2015	2014	3 Years	5 Years	10 Years
Total Fund	7.6%	12.3%	(0.8)%	4.7%	17.9%	6.2%	8.1%	6.0%
Composite Benchmark*	7.4	12.0	0.7	4.0	16.3	6.6	7.9	6.0
Consumer Price Index	2.9	1.6	0.1	0.1	2.1	1.8	1.5	1.6
U.S. Equities	14.3	18.7	(1.7)	6.4	24.1	10.0	11.9	9.8
Russell 3000 Index	14.8	18.5	2.1	7.3	25.2	11.6	13.3	10.2
International Equities	7.6	22.1	(7.1)	(1.0)	23.8	6.7	8.1	4.9
MSCI-ACWI ex US Index IMI Gross	7.7	20.5	(9.2)	(4.6)	22.8	5.5	6.4	2.9
Fixed Income	0.9	0.9	1.6	(1.4)	6.5	1.1	1.6	2.4
Barclays Capital U.S. Universal Index	(0.3)	0.9	5.8	1.6	5.2	2.1	2.6	4.1
Real Estate	7.3	7.1	12.0	16.3	14.5	8.4	10.8	3.6
NCREIF Real Estate Index	7.1	6.9	10.8	13.4	11.7	8.3	10.0	6.3
Private Equity	20.6	17.9	7.9	21.5	24.7	14.8	17.6	12.3

Note: Calculations are based on a time series of linked monthly returns (IRR), producing a time weighted effect.
Total fund return is presented net of fees. All other return information is presented gross of fees

*** Composite Benchmark:**

Effective 07/17: 23% Russell 3000; 13% MSCI-EAFE Index; 8% MSCI Emerging Markets Index; 7% Cambridge Private Equity Index (1Q lagged); 10% Barclays Aggregate; 4% Barclays Intermediate Treasuries; 4% Barclays Long Term Treasury Index; 4% Barclays US TIPS Index; 2.5% Barclays High Yield Index; 2.5% CSFB Leveraged Loan Index; 1.0% JPM GBI EM Global Diversified (unhedged); 1.0% JPM EMBI Global Diversified (hedged); 8% S&P/LSTA US Levered Loan 100 Index; 10% NCREIF ODCE ; 2% CPI + 3.5%.

Effective 07/16: 23% Russell 3000; 13% MSCI-EAFE index; 7% MSCI Emerging Markets index; 10% Cambridge Private Equity index; 11% Barclays Aggregate; 3% Barclays Long Term Treasury index; 10% Barclays US TIPS index; 3% Barclays High Yield index; 3% CSFB Leveraged Loan index; 1.5% JPM GBI EII Global Diversified (unhedged); 1.5% JPM EMBI Global Diversified (hedged); 11% NCREIF ODCE; 5% CPI +4%; 3% HFRI Fund of Fund Composite.

Effective 06/14: 30% Russell 3000; 20% MSCI-ACWI ex US IMI Gross; 25% Barclays Capital U.S. Universal; 10% NCREIF ODCE; 5% Custom Private Equity Benchmark which is based on preliminary data subject to change; 10% HFRI Fund of Funds Index. The Custom Private Equity benchmark is based on peer universe return data compiled and published by Cambridge Associates, LLC. The custom benchmark returns are calculated as pooled internal rates of return (IRR).

Effective 01/14: 30% Russell 3000; 20% MSCI-ACWI ex US; 25% Barclays Capital U.S. Universal; 10% NCREIF ODCE; 5% Venture Economics Pooled Average Periodic IRR which is based on preliminary data subject to revision on a quarterly basis; 10% HFRI Fund of Funds Index.

Effective 07/11: 30% Russell 3000; 20% MSCI-ACWI ex US; 25% Barclays Capital U.S. Universal; 10% NCREIF ODCE; 5% Venture Economics Pooled Average Periodic IRR which is based on preliminary data subject to revision on a quarterly basis; 10% HFRX Equity Hedged Index.

Effective 07/07: 30% Russell 3000; 20% MSCI-EAFE; 25% Lehman Universal; 10% NCREIF; 5% Venture Economics Pooled Average Periodic IRR which is based on preliminary data subject to revision on a quarterly basis; 10% HFRX Equity Hedged Index.

Effective 03/06: 8% Russell Midcap Growth; 7% Russell 2000 Value; 5% Russell 1000 Growth; 15% Russell 1000 Value;10% S&P 500;3% S&P Dev. Ex-U.S.<$2B:7% MSCI-EAFE; 10% NCREIF; 5% Lehman High Yield;10% Lehman Aggregate;10% Lehman Int. Govt/Corp;10% NCREIF

Effective 12/03: 45% Wilshire 5000; 10% MSCI-EAFE; 25% Lehman Universal; 10% NCREIF; 5% Venture Economic All Private Equity Index which is based on preliminary data subject to revision on a quarterly basis; 5% HFRX Equity Hedged Index.

Effective 11/08, the Lehman Universal benchmark ceased to exist. Barclays Capital U.S. Universal is the benchmark currently used by ISBI.

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ACTUARIAL SECTION

The schedules in this section of the report were prepared to support the actuarially determined contribution for fiscal year 2020 under the State of Illinois' funding plan. The total actuarial liability, the actuarial value of assets, and unfunded accrued actuarial liability as presented in the Actuarial section of this report using the State's funding method does not conform with GASB Statement No. 67 and therefore, the amounts presented in the Actuarial section of this report differ from the amounts presented for financial reporting purposes in the financial section of this report.

GRS Retirement Consulting

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November 26, 2018

Board of Trustees and Executive Secretary
Judges' Retirement System of Illinois
P. O. Box 19255
2101 S. Veterans Parkway
Springfield, Illinois 62794-9255

Re: Actuarial Certification

At your request, we have performed the annual actuarial valuation of the assets and liabilities of the Judges' Retirement System of Illinois ("JRS" or "System") as of June 30, 2018. This actuarial valuation has been performed to measure the funding status of the System and determine the State's statutory contribution rate for the year beginning July 1, 2019, and ending June 30, 2020. Public Act ("P.A.") 100-0023, effective July 6, 2017, modified the State's funding policy to include smoothing State contribution rate increases or decreases due to changes in actuarial assumptions, including investment return assumptions, over a five-year period in equal annual amounts beginning in fiscal year 2018. In addition, changes in actuarial or investment assumptions that increased or decreased the State contribution rate in fiscal years 2014 through 2017 are to be smoothed over a five year period in equal annual amounts, applying only to the portion of the five year phase-in that is applicable to fiscal years on and after 2018.

Gabriel, Roeder, Smith & Company ("GRS") has prepared this report exclusively for the Trustees of the Judges' Retirement System of Illinois; GRS is not responsible for reliance upon this report by any other party. This report may be provided to parties other than JRS only in its entirety and only with the permission of the Trustees.

The required statutory contribution rate has been determined under the Projected Unit Credit Cost Method, providing for 90 percent funding of total actuarial liabilities by fiscal year 2045 as required by 40 ILCS Section 5/18-131(c). Contribution rates are determined according to P.A. 93-0002 and P.A. 100-0023 reflecting the infusion of the proceeds from the sale of general obligation bonds and five-year smoothing of State contribution rate increases due to changes in actuarial assumptions resulting from the 2012 and 2016 experience reviews, and 2018 economic assumption review of JRS. The contribution rates also reflect the impact of P.A. 96-0889, which created a second tier for members of JRS hired after December 31, 2010.

For the actuarial valuation as of June 30, 2018, the assumed rate of return used to discount liabilities and project assets was 6.75 percent.

The required statutory contribution rates and amounts for fiscal year beginning July 1, 2019, as determined in the June 30, 2018, actuarial valuation are shown on the following page.

120 North LaSalle Street | Suite 1350 | Chicago, Illinois 60602-3495

Board of Trustees and Executive Secretary
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	Employer's Normal Cost [a]	Amortization Payment [b]	Total
Required Rate	23.168%	68.683%	91.851%
Required Contribution	36,363,000	107,797,000	144,160,000

[a] *Includes Administrative Expenses.*
[b] *Under the Statutory funding policy an amortization payment is not directly calculated. The amortization payment is the difference between the total statutory contribution and the employer normal cost contribution.*

Based on the provisions of P.A. 97-0694, the required statutory contribution for the fiscal year beginning July 1, 2019, is submitted to the state actuary, governor, and General Assembly. Under the act, the state actuary is required to review the assumptions and methods used to perform the actuarial valuation and develop the required statutory contributions. The final certification of the required statutory contribution is due by January 15, 2019.

Pursuant to P.A. 96-0043, for purposes of determining the statutory contribution rate, an actuarial value of the System's assets was used. The actuarial value of assets is assumed to earn a rate of return equal to the System's actuarially assumed rate of return. The liabilities have been valued based on financial and employee data, which is supplied by the administrative staff of the System and verified by the System's auditor. We did not audit this data, but have reviewed the statistical support and concluded that the data is reasonable and consistent with the prior year's data.

In our opinion, the calculations also comply with the requirements of Illinois state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board. The System's current contribution rate determined under the statutory funding policy may not conform with the Actuarial Standards of Practice. Therefore, the Board adopted a contribution policy to be used to calculate the Actuarially Determined Contribution ("ADC") under GASB Statements Nos. 67 and 68 for financial reporting purposes. All of our work conforms with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

Although the statutory contribution requirements were met, the statutory funding method generates a contribution requirement that is less than a reasonable actuarially determined contribution. Meeting the statutory requirement does not mean that the undersigned agree that adequate actuarial funding has been achieved. We recommend the adherence to a funding policy, such as the Board policy used to calculate the ADC under GASB Statements Nos. 67 and 68, that finances the normal cost of the plan as well as an amortization payment that seeks to pay off any unfunded accrued liability over a closed-period of 25 years, as a level percent of capped payroll.

This actuarial valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

Board of Trustees and Executive Secretary
November 26, 2018
Page 3

We certify that the information presented herein is accurate and fairly portrays the actuarial position of JRS as of June 30, 2018. We prepared the accompanying Summary of Actuarial Cost Method and Major Actuarial Assumptions, but the JRS staff prepared the other supporting schedules in this section and the trend tables in the financial section, based on information supplied in our report.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the JRS as of the actuarial valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

This actuarial certification is provided to the intended user, the Board of Trustees, in conjunction with the JRS actuarial valuation report as of June 30, 2018. Additional information regarding actuarial assumptions and methods, and important additional disclosures are provided in the full actuarial valuation report as of June 30, 2018, which is available on the JRS website, and is an integral part of this certification.

Alex Rivera and Lance J. Weiss are Members of the American Academy of Actuaries (MAAA) as indicated, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

Alex Rivera

Alex Rivera, FSA, EA, MAAA
Senior Consultant

Lance J. Weiss

Lance J. Weiss, EA, MAAA, FCA
Senior Consultant

GRS

INTRODUCTION

Annually, the System's actuarial consultants perform a valuation of the liabilities and reserves of the System in order to make a determination of the amount of contributions required from the state. These results are then certified to the Board.

The Board, in turn, has the duty of certifying an employer contribution amount, required to be paid to the System by the state during the succeeding fiscal year.

The employers' contribution amount, together with participants' contributions, income from investments and any other income received by the System, shall be sufficient to meet the cost of maintaining and administering the System on a funded basis in accordance with actuarial requirements, pursuant to Chapter 40, Section 5/18-131 of the Illinois Compiled Statutes.

In August, 1994, Senate Bill 533 was signed into law as Public Act 88-0593. This funding legislation, which became effective July 1, 1995, provides that:

- For fiscal years 1996 through 2010, the contribution to the System, as a percentage of the payroll, shall be increased in equal annual increments so that by fiscal year 2010 the contribution rate is at the same level as the contribution rate for fiscal years 2011 through 2045.
- For fiscal years 2011 through 2045, the minimum contribution to the System for each fiscal year shall be an amount determined to be sufficient to bring the total actuarial value of assets of the System up to 90% of the total actuarial liabilities of the System by the end of fiscal year 2045. In making these determinations, the required contribution shall be calculated each year as a level percentage of payroll over the years remaining to and including fiscal year 2045 and shall be determined under the projected unit credit actuarial cost method.
- Beginning in fiscal year 2045, the minimum contribution to the System for each fiscal year shall be the amount needed to maintain the total actuarial value of assets of the System at 90% of the total actuarial liabilities of the System.

The funding legislation also provides for the establishment of a continuing appropriation of the required state contributions to the System. This has, in effect, removed the appropriation of these funds from the annual budgetary process.

In April, 2003, House Bill 2660 was signed into law as Public Act 93-0002. This legislation authorized the sale of $10 billion of General Obligation bonds for the purpose of making contributions to the five state-financed retirement systems. This legislation also modified the funding plan by mandating that, beginning in fiscal year 2005, the required state contribution for each fiscal year not exceed the state contributions that would have been required had the General Obligation bond program not been in effect, reduced by the total debt service for each year for the System's portion of the General Obligation bond proceeds.

In June, 2005, Senate Bill 0027 was signed into law as Public Act 94-0004. This legislation further modified the funding plan by reducing the amount of required employer contributions for fiscal years 2006 and 2007 that would have otherwise been required under Public Act 88-0593, as modified by Public Act 93-0002. The required state contributions for fiscal years 2008 through 2010 were then to be increased incrementally as a percentage of the participant payroll so that by fiscal year 2011 the state would be contributing at the required level contribution rate to achieve the financing objective of a 90% funded status by the end of fiscal year 2045.

The total amount of statutorily required employer contributions for fiscal year 2018 was $135,962,000. Likewise the total amount of employer contributions received from the state during fiscal year 2018 was $135,962,000. As stated in the actuarial certification letter, although the statutory funding plan has been met, the contributions are less than the Board's policy to calculate the actuarially determined contribution under GASB 67 and 68.

The Schedule of State Contributions contained within the Required Supplementary Information (RSI) section of this report, includes a ten-year comparative history of the actuarially determined contributions and the actual contributions paid by the State.

Review by the State Actuary

Pursuant to state law, the assumptions and valuations prepared by the actuaries of each of the state-funded retirement systems are to be reviewed annually by the State Actuary, Cheiron. Within the review of the FY 2017 JRS actuarial valuation, Cheiron recognized and recommended the continued annual review of economic assumptions prior to the commencement of the valuation so that changes to the assumptions can be implemented in the valuation.

Cheiron recognized that the actual funding of the System is based on State statute and a statutory change would be required to fully implement their recommendations to change the funding methodology. Finally, they recommended the inclusion of stress testing within the valuation report itself to document the variety of stressors can have on State costs to sustain the System.

A summary of the assumption changes adopted for recent valuations can be found in this section and within the RSI of this annual report.

ACTUARIAL COST METHOD AND SUMMARY OF MAJOR ACTUARIAL ASSUMPTIONS

The actuarial cost method used by the System for funding purposes that is statutorily required by the State of Illinois differs from the entry age actuarial cost method mandated by GASB Statement No. 67 that is used for financial reporting purposes. The System utilizes the projected unit credit actuarial cost method. Under this method, the actuarial liability is the actuarial present value or that portion of a participant's projected benefit that is attributable to service to date on the basis of future compensation projected to retirement. The normal cost represents the actuarial present value of the participant's projected benefit that is attributable to service in the current year, again based on future compensation projected to retirement.

Certain assumptions used to determine the State's required contribution under its statutory funding plan differ from assumptions used for financial reporting purposes that are mandated by GASB Statement No. 67. GASB Statement No. 67 mandates the use of a long-term blended rate of return that utilizes the System's 6.75% expected rate of return until the projected fiduciary net position of the System is exhausted at which point a 20 year tax-exempt general obligation municipal bond rate is used (3.62%) resulting in a long-term blended rate of return of 6.60% that differs from the System's expected rate of return of 6.75% used for State funding purposes. The State uses an actuarial value of assets of $1,012,757,312 that recognizes gains and losses from investment returns in equal amounts over a five year period in its assumptions. GASB Statement No. 67 mandates the use of the market value of assets of $1,012,484,801 in its assumptions used for financial reporting purposes.

Actuarial gains and losses are recognized in the unfunded actuarial liability of the System. However, for purposes of determining future employer contributions, the actuarial gains and losses are amortized in accordance with the funding plan as previously described.

A description of the actuarial assumptions utilized for fiscal year 2018 follows:

Dates of Adoption: The Projected Unit Credit Actuarial Cost Method was adopted June 30, 1987; all other assumptions were adopted June 30, 2016.

Asset Valuation Method: The actuarial value of assets is equal to the fair value of assets adjusted for any actuarial gains or losses from investment return incurred in the fiscal year recognized in equal amounts over the five year period following that fiscal year.

Mortality Rates: Post-retirement mortality - RP-2014 White Collar Total Healthy Annuitant Mortality Table, sex distinct, set forward one (1) year for males and set back one (1) year for females. Generational mortality improvement were factored in using MP-2014 two-dimensional mortality improvement scales recently released by the Society of Actuaries (SOA). Pre-retirement mortality: RP-2014 White Collar Total Employee Mortality table, sex distinct with generational mortality improvements using MP-2014, two-dimensional mortality improvement scales recently released by the SOA to reflect that experience shows active members having lower mortality rates than retirees of the same age.

Salary Increase: 2.75% per year (consisting of an inflation component of 2.5% per year and a productivity/merit/promotion component of .25% per year), compounded annually. In determining total covered payroll, the size of the active group is assumed to remain constant.

General Inflation: 2.5% per year, compounded annually.

Interest Rate: 6.75% per year, compounded annually, net of expenses.

Marital Status: It was assumed that 75% of active and retired participants are married.

Spouse's Age: The age of the female spouse was assumed to be 4 years younger than the age of the male spouse.

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.

Termination Rates: Termination rates based on the recent experience of the System were used. The following is a sample of the termination rates that were used:

Tier 1 and Tier 2

Age	Rate of Termination Male	Rate of Termination Female	Age	Rate of Termination Male	Rate of Termination Female
30	.0175	.0175	50	.0118	.0108
35	.0170	.0160	55	.0102	.0092
40	.0154	.0144	60	.0084	.0074
45	.0136	.0126	65	.0067	.0057

NOTE: Tier 2 members with less than five years of service have a 1.75% flat withdrawal rate.

It is assumed that terminated participants will not be rehired. The rates apply only to participants who have not fulfilled the service requirement necessary for retirement at any given age.

Disability Rates: There is no assumption for disability.

Retirement Rates: Tier 1 rates of retirement for each age from 55 to 80 and Tier 2 rates of retirement for each age from 62 to 80 based on the recent experience of the System were used. The following are samples of the rates of retirement that were used:

Tier 1		Tier 2	
Age	Rate of Retirement	Age	Rate of Retirement
55	.070	62	.110
60	.150	65	.140
65	.100	67	.300
70	.110	70	.130
75	.150	75	.150
80	1.000	80	1.000

The above retirement rates are equivalent to an average retirement age of 64.0 for Tier 1 and 67.7 for Tier 2.

Experience Review: New assumptions were adopted as of June 30, 2016 as a result of an experience review for the three year period ending June 30, 2015. An economic assumption review was performed in 2018.

NOTE: The actuarial assumptions have been recommended by the actuary and adopted by the System's Board of Trustees, at the dates indicated previously.

For FY 2018, the following assumption changes were implemented:

- The rate of inflation decreased from 2.75% to 2.50%.
- The salary increase assumption was changed to 2.75% per year, compounded annually. That rate includes a 0.25 per year productive/merit/promotion component.
- The payroll growth assumption was decreased from 3.00% to 2.75%.

Key assumption changes which were based on the most recently completed experience study and implemented in prior fiscal years' valuations included the following:

- The investment return assumption was decreased from 7.00% to 6.75%.
- 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 1.75%.
- The overall normal retirement rates were decreased 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.

SUMMARY OF AND CHANGES TO THE PLAN PROVISIONS

Please refer to the Plan Summary and Legislative Section for a summary of the plan provisions and legislative amendments that were evaluated and considered by the actuary.

SHORT-TERM SOLVENCY TEST

A short-term solvency test is one means of checking a system's progress under its funding program. In a short-term solvency test, the plan's present assets (primarily cash and investments) are compared with: 1) active and inactive participant contributions on deposit; 2) the liabilities for future benefits to present retired lives; and 3) the liabilities for service already rendered by active and inactive participants. In a system that has been following level percent of payroll financing, the liabilities for service already rendered by active and inactive participants (liability 3) should be partially covered by the remainder of present assets. If the system continues using level cost financing, the funded portion of liability 3 will increase over time, although it is very rare for a system to have its liability 3 fully funded.

COMPUTED ACTUARIAL VALUES

	Aggregate Accrued Liabilities For				Percentage of Accrued Liabilities Covered By Assets		
Fiscal Year	(1) Active and Inactive Participant Contributions	(2) Retirement and Survivor Annuitants	(3) Active and Inactive Participants (Employer Financed Portion)	Actuarial Value of Assets*	(1)	(2)	(3)
2009	$ 157,840,805	$ 934,047,891	$ 456,620,839	$ 616,849,071	100.0%	49.1%	0.0%
2010	166,360,698	1,070,374,455	582,712,673	619,925,786	100.0	42.4	0.0
2011	167,567,660	1,244,264,760	540,706,980	614,596,203	100.0	35.9	0.0
2012	177,546,650	1,289,080,804	555,088,342	601,219,999	100.0	32.9	0.0
2013	180,073,170	1,419,812,702	556,919,119	610,195,584	100.0	30.3	0.0
2014	185,823,705	1,481,437,495	562,015,980	705,250,403	100.0	35.1	0.0
2015	190,122,719	1,563,349,628	560,674,968	804,188,844	100.0	39.3	0.0
2016	192,735,307	1,777,351,306	576,363,041	870,892,960	100.0	38.2	0.0
2017	193,145,807	1,898,815,321	597,297,444	942,988,992	100.0	39.5	0.0
2018	195,651,432	1,978,287,511	547,913,904	1,012,757,312	100.0	41.3	0.0

** For fiscal years prior to 2009, the actuarial value of assets was equal to the fair value of assets. Beginning in fiscal year 2009, the actuarial value of assets is equal to the fair value of assets adjusted for any actuarial gains or losses from investment return incurred in the fiscal year recognized in equal amounts over the five year period following that fiscal year.*

VALUATION RESULTS

	June 30, 2018
Actuarial Liability:	
For Active Participants:	
Pension benefits	$ 534,312,313
Cost-of-living adjustments	181,231,154
Death benefits	16,133,462
Withdrawal benefits	3,358,245
Total	735,035,174
For Participants Receiving Benefits:	
Retirement annuities	1,721,028,246
Disability annuities	-
Survivor annuities	257,259,265
Total	1,978,287,511
For Inactive Participants	8,530,162
Total Actuarial Liability	2,721,852,847
Actuarial Value of Assets	1,012,757,312
Unfunded Actuarial Liability	$ 1,709,095,535

SUMMARY OF ACCRUED AND UNFUNDED ACCRUED LIABILITIES
(Analysis of Funding)

In an inflationary economy, the value of the dollar decreases. This environment results in employees' pay and retirement benefits increasing in dollar amounts resulting in unfunded accrued liabilities which increase in dollar amounts, all at a time when the actual substance of these items may be decreasing. Looking at just the dollar amounts of unfunded accrued liabilities can be misleading. The ratio of the unfunded accrued liabilities to active employee payroll provides an index which clarifies understanding. The smaller the ratio of unfunded liabilities to active participant payroll, the stronger the system. Observation of this relative index over a period of years will give an indication of whether the system is becoming financially stronger or weaker.

Fiscal Year	Total Actuarial Liability	Actuarial Value of Assets *	Actuarial Value of Assets as a % of Actuarial Liability	Total Unfunded Actuarial Liability	Employee Covered Payroll	Unfunded Actuarial Liability as a % of Employee Covered Payroll
2009	$ 1,548,509,535	$ 616,849,071	39.8%	$ 931,660,464	$ 155,645,000	598.6%
2010	1,819,447,826	619,925,786	34.1%	1,199,522,040	161,164,000	744.3%
2011	1,952,539,400	614,596,203	31.5%	1,337,943,197	169,155,000	791.0%
2012	2,021,715,796	601,219,999	29.7%	1,420,495,797	171,498,000	828.3%
2013	2,156,804,991	610,195,584	28.3%	1,546,609,407	177,006,000	873.8%
2014	2,229,277,180	705,250,403	31.6%	1,524,026,777	171,152,000	890.5%
2015	2,314,147,315	804,188,844	34.8%	1,509,958,471	167,560,000	901.1%
2016	2,546,449,654	870,892,960	34.2%	1,675,556,694	164,926,000	1,015.9%
2017	2,649,258,572	942,988,992	35.6%	1,706,269,580	164,820,000	1,035.2%
2018	2,721,852,847	1,012,757,312	37.2%	1,709,095,535	160,584,000	1,064.3%

** For fiscal years prior to 2009, the actuarial value of assets was equal to the fair value of assets. Beginning in fiscal year 2009, the actuarial value of assets is equal to the fair value of assets adjusted for any actuarial gains or losses from investment return incurred in the fiscal year recognized in equal amounts over the five year period following that fiscal year.*

RECONCILIATION OF UNFUNDED ACTUARIAL LIABILITY

	2018
Unfunded actuarial liability, beginning of fiscal year	$1,706,269,580
Contributions due:	
Interest on the unfunded actuarial liability	115,173,197
Participant contributions	14,295,562
Employer normal cost	40,084,816
Interest on participant contributions and employer normal cost	1,805,370
Total contributions due	171,358,945
Contributions paid:	
Participant contributions	14,295,562
Employer contributions	135,962,000
Interest on participant contributions and State contributions	4,988,388
Total contributions paid	155,245,950
Contribution shortfall	16,112,995
Actuarial (gain) loss:	
Retirements	2,927,512
Incidence of disability	-
In-service mortality	425,264
Retiree mortality and other	(851,091)
Salary increases	(4,972,437)
Terminations	1,049,269
Investment	(5,360,651)
New entrant liability	386,679
Other	2,750,248
Total actuarial (gain)/loss	+ (3,645,207)
Assumption Changes	+ (9,641,833)
Total increase in unfunded actuarial liability	= 2,825,955
Unfunded actuarial liability, end of fiscal year	$1,709,095,535

SCHEDULE OF RETIRANTS AND SURVIVORS' ANNUITANTS ADDED TO AND REMOVED FROM ROLLS

Fiscal	Annuitants				Survivors				
Year	Beginning	Additions	Deletions	Ending	Beginning	Additions	Deletions	Ending	Total
2009	624	60	37	647	332	19	16	335	982
2010	647	41	23	665	335	19	20	334	999
2011	665	83	28	720	334	14	21	327	1,047
2012	720	29	24	725	327	20	16	331	1,056
2013	725	60	30	755	331	20	28	323	1,078
2014	755	45	33	767	323	30	20	333	1,100
2015	767	48	28	787	333	21	20	334	1,121
2016	787	60	30	817	334	23	30	327	1,144
2017	817	59	24	852	327	18	23	322	1,174
2018	852	49	30	871	322	20	20	322	1,193

SCHEDULE OF ACTIVE MEMBER VALUATION DATA

Active Members

Valuation Date June 30	Number	Employee Payroll	Annual Average Pay	% Increase/(decrease) In Average Pay
2009	968	$155,645,000	$160,790	7.1%
2010	966	161,164,000	166,836	3.8%
2011	968	169,155,000	174,747	4.7%
2012	968	171,498,000	177,167	1.4%
2013	962	177,006,000	183,998	3.9%
2014	951	171,152,000	179,971	(2.2)%
2015	961	167,560,000	174,360	(3.1)%
2016	947	164,926,000	174,156	(0.1)%
2017	953	164,820,000	172,949	(0.7)%
2018	936	160,584,000	171,564	(0.8)%

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The tables in this section present historical financial information as well as certain historical demographic information pertaining to participants and benefit recipients.

STATISTICAL SECTION

Financial Schedules:
These schedules present information pertaining to assets, liabilities, reserves, and changes in fiduciary net position over a 10-year period.

Source: The System's Comprehensive Annual Financial Report (CAFR) for the relevant year.

Participant Demographic Schedules:
These schedules present certain information pertaining to active and inactive participants over a 10-year period.

Source: Annual report and data produced from the System's electronic files for the relevant year.

Benefit Recipient Demographic Schedules:
These schedules present certain information pertaining to benefit recipients, benefit types, average monthly benefits, ranges of monthly benefits, and location of retirees.

Source: Annual report and data produced from the System's electronic files for the relevant year.

ASSET BALANCES

Fiscal Year Ended June 30	Cash	Receivables	Investments	Securities lending collateral with State Treasurer	Capital Assets Net of Accumulated Depreciation	Total
2009	$ 17,991,016	$ 25,372,085	$ 435,604,601	$ -	$ 3,318	$ 478,971,020
2010	16,644,537	261,482	506,463,522	6,242,000	3,841	529,615,382
2011	18,015,766	221,316	587,794,578	7,261,000	3,377	613,296,037
2012	10,690,635	8,211,574	559,139,279	5,945,000	9,326	583,995,814
2013	23,059,590	7,621,829	612,751,563	16,535,000	7,678	659,975,660
2014	32,055,593	5,486,808	738,704,938	13,475,000	8,389	789,730,728
2015	33,161,274	5,797,618	795,296,831	12,776,000	26,929	847,058,652
2016	49,540,595	5,703,981	785,176,162	11,503,000	47,968	851,971,706
2017	25,657,962	16,623,339	899,652,118	9,643,000	55,839	951,632,258
2018	28,938,179	5,419,787	978,196,836	12,439,000	70,481	1,025,064,283

LIABILITIES AND RESERVE BALANCES

Fiscal Year Ended June 30	Total Liabilities	Reserve for Participant Contributions	Reserve for Future Operations	Total Reserves	Total
2009	$ 94,943	$ 157,840,805	$ 321,035,272	$ 478,876,077	$ 478,971,020
2010	6,339,230	166,360,698	356,915,454	523,276,152	529,615,382
2011	7,335,829	167,567,660	438,392,548	605,960,208	613,296,037
2012	6,019,447	177,546,650	400,429,717	577,976,367	583,995,814
2013	16,645,692	180,073,170	463,256,798	643,329,968	659,975,660
2014	13,717,700	185,823,705	590,189,323	776,013,028	789,730,728
2015	13,148,497	190,122,719	643,787,436	833,910,155	847,058,652
2016	11,682,846	192,735,307	647,553,553	840,288,860	851,971,706
2017	9,828,726	193,145,807	748,657,725	941,803,532	951,632,258
2018	12,579,482	195,651,432	816,833,369	1,012,484,801	1,025,064,283

NUMBER OF PARTICIPANTS

	Active			Inactive			
At June 30	Tier 1	Tier 2	Total	Tier 1	Tier 2	Total	Total
2009	968	-	968	23	-	23	991
2010	966	-	966	20	-	20	986
2011	955	13	968	16	-	16	984
2012	923	45	968	15	-	15	983
2013	854	108	962	19	3	22	984
2014	810	141	951	16	3	19	970
2015	760	201	961	20	4	24	985
2016	701	246	947	20	5	25	972
2017	640	313	953	16	7	23	976
2018	594	342	936	13	8	21	957

NUMBER OF RECURRING BENEFIT PAYMENTS/ TERMINATION REFUNDS

On June 30	Retirement Annuities	Survivors' Annuities	Temporary Disability	Total Recurring Benefit Payments	Termination Refunds
2009	647	335	1	983	1
2010	665	334	2	1,001	–
2011	720	327	–	1,047	3
2012	725	331	–	1,056	1
2013	755	323	–	1,078	3
2014	767	333	–	1,100	2
2015	787	334	–	1,121	3
2016	817	327	–	1,144	1
2017	852	322	1	1,175	7
2018	871	322	-	1,193	1

NUMBER ON ACTIVE PAYROLLS

On June 30	Supreme Court Justices	Appellate Court Justices	Circuit Court Judges	Retired Judges Recalled	Total
2009	7	40	892	30	969
2010	7	39	894	27	967
2011	7	38	896	27	968
2012	7	37	903	21	968
2013	7	39	909	9	964
2014	7	39	902	5	953
2015	7	40	913	3	963
2016	7	40	896	4	947
2017	7	41	904	1	953
2018	7	39	889	1	936

ACTIVE RETIREES BY STATE

CHANGES IN FIDUCIARY NET POSITION

Fiscal Year	2009	2010	2011	2012
Additions				
Participant contributions	$ 15,763,410	$ 16,001,619	$ 16,725,191	$ 16,444,796
Employer Contributions:				
State of Illinois	59,983,000	78,509,810	62,428,783	63,628,000
Other sources	-	-	265,677	16,099
Total employer contributions	59,983,000	78,509,810	62,694,460	63,644,099
Net investment income/(loss)	(122,716,471)	42,532,318	105,253,385	(69,096)
Miscellaneous	-	-	5,000	–
Total additions to /(deduction from) fiduciary net position	(46,970,061)	137,043,747	184,678,036	80,019,799
Deductions				
Benefit Payments:				
Temporary disability	81,674	139,775	72,613	–
Retirement annuities	68,876,522	73,439,970	82,076,983	87,161,263
Survivors' annuities	16,861,343	17,990,012	18,570,146	19,491,832
Total benefit payments	85,819,539	91,569,757	100,719,742	106,653,095
Refunds:				
Termination	29,417	-	81,210	55
Other	419,892	510,555	570,983	586,400
Total refunds	449,309	510,555	652,193	586,455
Administrative expenses	565,588	563,360	622,045	764,090
Total deductions from fiduciary net position	86,834,436	92,643,672	101,993,980	108,003,640
Change in fiduciary net position	**$ (133,804,497)**	**$ 44,400,075**	**$ 82,684,056**	**$ (27,983,841)**

2013	2014	2015	2016	2017	2018
$ 16,368,637	$ 15,918,732	$ 15,431,105	$ 14,962,055	$ 14,770,467	$ 14,295,562
88,210,000	126,808,000	133,982,000	132,060,000	131,334,000	135,962,000
29,564	7,881	57,684	–	–	–
88,239,564	126,815,881	134,039,684	132,060,000	131,334,000	135,962,000
76,886,319	110,058,987	36,009,150	(6,470,553)	97,796,479	69,949,646
–	–	–	–	–	–
181,494,520	252,793,600	185,479,939	140,551,502	243,900,946	220,207,208
–	–	–	–	40,417	40,678
93,088,908	97,116,965	102,794,428	109,011,315	116,611,033	122,966,147
20,468,521	21,474,000	22,859,921	23,560,481	23,845,754	25,140,113
113,557,429	118,590,965	125,654,349	132,571,746	140,497,204	148,146,938
151,515	188,764	24,847	46,107	374,473	70,336
1,600,025	499,159	920,960	611,944	600,192	411,380
1,751,540	687,923	945,807	658,051	974,665	481,716
831,950	831,652	982,656	942,950	914,405	897,285
116,140,919	120,110,540	127,582,812	134,172,797	142,386,274	149,525,939
$ 65,353,601	**$ 132,683,060**	**$ 57,897,127**	**$ 6,378,705**	**$ 101,514,672**	**$ 70,681,269**

RETIREMENT ANNUITANTS STATISTICS AND AVERAGE MONTHLY BENEFITS

	At Retirement			
Fiscal Year Ended June 30	Average Age	Average Length of Service*	Average Current Age	Average Current Monthly Benefit
2009	62.5	17.2	71.4	$ 9,098
2010	62.4	17.1	71.5	9,379
2011	62.4	17.1	71.2	9,797
2012	62.4	17.0	71.6	10,118
2013	62.3	17.0	71.6	10,441
2014	62.1	16.8	71.7	10,719
2015	62.0	16.7	71.7	11,052
2016	62.0	16.7	71.8	11,333
2017	62.1	16.7	71.8	11,640
2018	62.1	16.6	72.0	11,904

* in years

Annuitants by Benefit Range (Monthly) on June 30, 2018

Benefit Range	Total	Cumulative Total	% of Total	Cumulative % of Total
$1-5,000	66	66	7.6%	7.6%
5,001-10,000	159	225	18.3	25.9
10,001-12,000	110	335	12.6	38.5
12,001-14,000	190	525	21.8	60.3
14,001-16,000	316	841	36.3	96.6
16,001-18,000	30	871	3.4	100.0

Survivors by Benefit Range (Monthly) on June 30, 2018

Benefit Range	Total	Cumulative Total	% of Total	Cumulative % of Total
$ 1-2000	43	43	13.3%	13.3%
2001-4000	33	76	10.2	23.5
4001-6000	44	120	13.7	37.2
6001-8000	65	185	20.2	57.4
8001-10000	101	286	31.4	88.8
10001-13000	36	322	11.2	100.0

Average Benefit Payments
Fiscal Years 2009 through 2018

Retirement Effective Dates		0-5		5-10		10-15		15-20		20-25		25-30		30+
							Years Credited Service							
Period 7/1/08 to 6/30/09														
Average monthly benefit	$	9,940	$	9,313	$	7,026	$	7,699	$	11,863	$	12,369	$	12,225
Final average salary	$	13,429	$	14,113	$	13,894	$	13,708	$	14,135	$	14,552	$	14,383
Number of retired members*		7		9		6		4		23		6		5
Period 7/1/09 to 6/30/10														
Average monthly benefit	$	9,462	$	9,855	$	7,369	$	7,372	$	11,687	$	9,670	$	7,055
Final average salary	$	13,408	$	14,306	$	13,328	$	13,830	$	14,183	$	14,814	$	14,525
Number of retired members*		6		4		6		6		15		2		2
Period 7/1/10 to 6/30/11														
Average monthly benefit	$	2,489	$	4,922	$	7,023	$	11,074	$	12,284	$	12,760	$	13,422
Final average salary	$	14,158	$	12,927	$	13,404	$	14,724	$	14,619	$	14,720	$	15,373
Number of retired members*		1		4		10		25		29		9		5
Period 7/1/11 to 6/30/12														
Average monthly benefit	$	847	$	3,601	$	7,891	$	10,649	$	12,140	$	12,420	$	12,166
Final average salary	$	6,915	$	13,897	$	14,722	$	14,825	$	14,482	$	14,612	$	14,314
Number of retired members*		1		3		7		10		5		2		1
Period 7/1/12 to 6/30/13														
Average monthly benefit	$	–	$	4,832	$	8,174	$	10,905	$	12,890	$	12,664	$	12,922
Final average salary	$	–	$	15,050	$	14,916	$	15,059	$	15,229	$	14,898	$	15,202
Number of retired members*		–		5		9		17		17		5		1
Period 7/1/13 to 6/30/14														
Average monthly benefit	$	1,999	$	5,489	$	8,093	$	10,526	$	12,825	$	13,324	$	12,411
Final average salary	$	14,632	$	15,370	$	15,015	$	15,293	$	15,242	$	15,675	$	14,601
Number of retired members*		2		3		13		12		12		2		1
Period 7/1/14 to 6/30/15														
Average monthly benefit	$	46	$	6,279	$	8,304	$	11,446	$	13,187	$	-	$	14,436
Final average salary	$	15,202	$	15,086	$	15,390	$	15,522	$	15,629	$	-	$	16,984
Number of retired members*		1		7		8		15		14		-		1
Period 7/1/15 to 6/30/16														
Average monthly benefit	$	767	$	5,120	$	8,062	$	11,828	$	13,275	$	12,653	$	14,082
Final average salary	$	13,152	$	14,653	$	15,310	$	15,559	$	15,817	$	15,579	$	16,567
Number of retired members*		1		11		11		15		16		5		1
Period 7/1/16 to 6/30/17														
Average monthly benefit	$	-	$	5,812	$	8,050	$	12,254	$	13,835	$	13,398	$	13,570
Final average salary	$	-	$	15,651	$	15,682	$	15,820	$	16,277	$	15,763	$	15,965
Number of retired members*		-		8		10		14		19		4		4
Period 7/1/17 to 6/30/18														
Average monthly benefit	$	225	$	6,189	$	8,417	$	10,997	$	13,876	$	14,870	$	16,245
Final average salary	$	3,214	$	16,094	$	15,510	$	15,892	$	16,384	$	17,494	$	19,112
Number of retired members*		1		4		9		16		13		3		1

** The number of retired members excludes new retirements with retroactive benefit start dates prior to the beginning of the period as well as resumptions of retirement benefits with original benefit start dates prior to the beginning of the period.*

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PLAN SUMMARY AND LEGISLATIVE SECTION

SUMMARY OF RETIREMENT SYSTEM PLAN

(As of June 30, 2018)

1. Purpose

The purpose of the System is to establish an efficient method of permitting retirement, without hardship or prejudice, of judges who are aged or otherwise incapacitated, by enabling them to accumulate reserves for themselves and their dependents for old age, disability, death and termination of employment.

The single employer defined benefit 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.

The provisions below apply to both Tier 1 and Tier 2 participants except where noted.

2. Administration

Responsibility for the operation of the System and the direction of its policies is vested in a Board of Trustees consisting of five members. The administration of the detailed affairs of the System is the responsibility of the Executive Secretary who is appointed by the Board of Trustees.

Administrative policies and procedures are designed to ensure an accurate accounting of funds of the System and prompt payment of claims for benefits within the applicable statute.

3. Employee Membership

All persons elected or appointed as a judge or associate judge of a Court become members of the System unless they file an election not to participate within 30 days of the date they are notified of this option.

4. Participant Contributions

Participants are required to contribute a percentage of salary as their share of meeting the various benefits at the rates shown below:

Retirement Annuity	7.5%
Automatic Annual Increase	1.0%
Survivors' Annuity	2.5%
Total	11.0%

Tier 1 participants contribute based on total annual compensation. Tier 2 participants contribute based on a statutorily capped compensation amount which is increased each year by 3% or the annual percentage increase in the Consumer Price Index, whichever is less.

A judge who elects not to participate in the survivors' annuity benefit is not required to make contributions for the survivors' annuity benefit in which case the total participant contribution rate is 8 1/2% of salary. Contributions for survivors' annuity are not required to qualify an eligible child for a child's annuity.

Participants who are eligible to receive the maximum rate of annuity may irrevocably elect to discontinue contributions and have their benefits "frozen" based upon the applicable salary in effect immediately prior to the effective date of such election.

Participants who have attained age 60 and are eligible to receive the maximum rate of annuity and have not elected to discontinue contributing to the System may irrevocably elect to have their contributions based only on the salary increases received on or after the effective date of such election rather than on the total salary received.

5. Retirement Annuity

A. Qualification of Participant

Tier 1: Upon termination of service, a judge is eligible for an unreduced retirement annuity at:

1. Age 60 with at least 10 years of credit
2. Age 62 with at least 6 years of credit
3. Age 55 with at least 26 years of credit

The retirement annuity of a judge who retires between the ages of 55 and 60 with at least 10 years of credit shall be reduced ½ of 1% for each month the judge's age is under age 60.

However, for a judge who retires on or after December 10, 1999, the percentage reduction in retirement annuity shall be reduced by 5/12 of 1% for every month of service in the System in excess of 20 years.

Tier 2: Upon termination of service, a judge is eligible for an unreduced retirement annuity at:

1. Age 67 with at least 8 years of credit

The retirement annuity of a judge who retires between the ages of 62 and 67 with at least 8 years of credit shall be reduced ½ of 1% for each month the judge's age is under 67.

B. Amount of Annuity

Tier 1: The retirement annuity is determined according to the following formula based upon the applicable salary:

- 3.5% for each of the first 10 years of credit
- 5.0% for each year of credit above 10 years

The maximum annuity is 85% of the applicable final average salary.

For participants who first serve as a judge before August 10, 2009 and terminate service on or after July 14, 1995, final average salary is the salary on the last day of employment as a judge or the highest salary received for employment as a judge in a position held for at least 4 consecutive years, whichever is greater.

For participants who first serve as a judge on or after August 10, 2009 and before January 1, 2011, final average salary is the average monthly salary during the 48 consecutive months of service within the last 120 months of service in which the total salary was the highest.

Tier 2: The retirement annuity is determined according to the following formula based upon the applicable final average salary:

- 3.0% for each year of credit

The maximum annuity is 60% of the applicable final average salary. The applicable final average salary is the average monthly salary during the 96 consecutive months of service within the last 120 months of service in which the total salary was the highest. The salary for any calendar year is capped in accordance with the statute governing the System. The cap is increased each year by 3% or the annual percentage increase in the Consumer Price Index, whichever is less.

C. Annual Increases in Retirement Annuity

Tier 1: Post retirement increases of 3% of the current amount of annuity are granted to participants effective in January of the year next following the first anniversary of retirement and in January of each year thereafter.

Tier 2: Post retirement increases to the current amount of annuity in an amount equal to the lesser of 3% or the annual percentage increase in the Consumer Price Index for All Urban Consumers are granted to participants effective in January of the year next following the first anniversary of retirement and in January of each year thereafter, but in no event prior to age 67.

D. Suspension of Retirement Annuity

Tier 1: The retirement annuity to any judge shall be suspended:

1. When the annuitant is employed for compensation by the State of Illinois as a judge, or

2. When the annuitant is employed for compensation by the State of Illinois in a permanent position other than legal counsel in the Office of the Governor or Chief Deputy Attorney General (assuming the annuitant does not participate in any pension fund or retirement system under the Illinois Pension Code with respect to such service and, has filed prior to July 1, 2005, a written election with the System), or

3. After 75 working days in any calendar year in which the annuitant is employed for compensation by the State of Illinois in a temporary position other than a judge.

The retirement annuity to any judge shall not be suspended:

1. If the annuitant accepts employment in any teaching or non-teaching capacity with a state college or university as long as the annuitant did not elect the provisions of the Reciprocal Act upon retirement with the State Universities Retirement System, or

2. If the annuitant accepts employment in an administrative or teaching position with a secondary school district as long as the district level positions participate in the Teachers' Retirement System of Illinois and are not considered state positions which participate in the State Employees' Retirement System of Illinois, or

3. If the annuitant serves as a part-time employee (not required to work at least 35 hours per week) in any of the following positions and has not elected to participate in the State Employees' Retirement System of Illinois with respect to such service.

- Legislative Inspector General
- Special Legislative Inspector General
- Office of the Legislative Inspector General Employee
- Executive Director of the Legislative Ethics Commission
- Legislative Ethics Commission staff

Tier 2: The retirement annuity being paid is suspended when an annuitant is employed on a full time basis and becomes a member or participant of the Judges' Retirement System Article or any other Article of the Illinois Pension Code.

6. Survivor's Annuity

A. Qualification of Survivor

If death occurs while in service as a judge, the judge must have established at least 1 1/2 years of credit. If death occurs after termination of service and prior to receipt of retirement annuity, the participant must have established at least 10 years of credit.

An eligible spouse, who has been married to the participant or annuitant for a continuous period of at least one year immediately preceding the date of death, qualifies at age 50, or at any age if there is in the care of the spouse any unmarried children of the member under age 18, over age 18 if mentally or physically disabled, or under age 22 and a full-time student. Eligible surviving children would be entitled to benefits even though the participant did not contribute for the survivors' annuity benefit.

B. Amount of Payment

If the participant's death occurs while in service, and assuming all payments have been made for full survivors' annuity credit, the surviving spouse would be eligible to 7 1/2% of salary or 66 2/3% of earned retirement annuity, whichever is greater. Eligible children of the participant would receive 5% of salary for each child with a maximum for all children of 20% of salary or 66 2/3% of earned retirement annuity, whichever is greater, regardless of whether full credit had been established for the survivors' annuity benefit.

If the participant's death occurs after termination of service or retirement, and assuming all payments have been made for full survivors' annuity credit, the surviving spouse would be eligible to 66 2/3% of earned retirement annuity. Eligible children would receive a survivors' annuity equal to the benefit of surviving children of a participant in service.

The benefit payment amount to a surviving spouse would be a prorated share of the full benefit amount noted above if the participant married or remarried after becoming a participant and elected to contribute for the survivors' annuity benefit prospectively from the date of marriage or remarriage.

C. Annual Increases in Survivors' Annuity

Tier 1: Increases of 3% of the current amount of annuity are granted to survivors in each January occurring on or after the commencement of the annuity if the deceased participant died while receiving a retirement annuity.

In the event of an active participant's death, increases of 3% of the current amount of annuity are granted to survivors effective in January of the year next following the first anniversary of the commencement of the annuity and in January of each year thereafter.

Tier 2: Increases to the current amount of annuity in an amount equal to the lesser of 3% or the annual percentage increase in the Consumer Price Index for All Urban Consumers are granted to survivors. Such increases are payable on each January 1 occurring on or after the commencement of the annuity if the deceased participant died while receiving a retirement annuity or, in other cases, on each January 1 occurring on or after the first anniversary of the commencement of the annuity, but in no event prior to age 67.

D. Duration of Payment

When all children, except for disabled children, are ineligible because of death, marriage or attainment of age 18 or age 22 in the case of a full-time student, the spouse's benefit is suspended if the spouse is under age 50 until attainment of such age.

7. Death Benefit

The following lump sum death benefits are payable to the named beneficiaries or estate of the participant only if there are no eligible survivors' annuity beneficiaries surviving the deceased participant.

A. Before Retirement

If the participant's death occurs before retirement, a refund of total contributions in the participant's account.

B. After Retirement

If the participant's death occurs after retirement, a refund of the excess of contributions over annuity payments, if any.

The following lump sum death benefit is payable to the named beneficiaries or estate of the survivor.

A. Death of Survivor Annuitant

Upon death of the survivor annuitant with no further survivors' annuity payable, a refund of excess contributions over total retirement and survivors' annuity payments, if any.

8. Disability Benefit

A. Permanent Total Disability

A participant who becomes totally and permanently disabled while serving as a judge with at least 10 years of credit is eligible for an unreduced retirement annuity regardless of age. If disability is service-connected, the annuity is subject to reduction by amounts received by a participant under the Workers' Compensation Act and the Workers' Occupational Diseases Act.

B. Temporary Total Disability

A participant with at least 2 years of service as a judge who becomes totally disabled and unable to perform the duties as a judge is entitled to a temporary disability benefit equal to 50% of salary payable during disability but not beyond the end of the term of office.

9. Refund of Contributions

A participant who terminates service as a judge may obtain a refund of total contributions made to the System, without interest, provided the participant is not immediately eligible to receive a retirement annuity. By accepting a refund, a participant forfeits all accrued rights and benefits in the System for his or herself and beneficiaries.

An unmarried participant or a married participant who becomes unmarried, either before or after retirement, is entitled to a refund of contributions made for the survivors' annuity benefit.

LEGISLATIVE AMENDMENTS

Legislative amendments with an effective date during fiscal year 2018 having an impact on the System:

Senate Bill 0042 (Public Act 100-0023; effective July 6, 2017)
Requires that any changes in the pension liability that result from actuarial assumption modifications, shall be smoothed over a five-year period, retroactive to the beginning of fiscal year 2018. In addition, any actuarial assumption changes that impacted the State contribution rate in fiscal years 2014 through 2017 are to be smoothed over a five-year period applying only the portion of the five-year phase in that is applicable to fiscal years on and after 2018. No later than November 1, 2017, the Board shall recalculate and recertify the FY 2018 contribution, factoring the changes to the required State contribution formula resulting from this legislation.

House Bill 0350 (Public Act 100-0334; effective August 25, 2017)
Provides that an eligible survivor of a member shall be ineligible for benefits if convicted of any felony relating to, arising out of, or in connection with the service of the member that earned such benefit.

NEW LEGISLATION

Legislative amendments with an effective date subsequent to June 30, 2018 having an impact on the System:

House Bill 4412 (Public Act 100-0902; effective August 27, 2018)
Provides that most retirement systems regulated under the Illinois Pension Code, shall make its best efforts to ensure that the racial and ethnic makeup of the senior administrative staff reflects such demographics of the membership of the respective fund.