



# COMPREHENSIVE ANNUAL FINANCIAL REPORT .....

FOR THE YEARS ENDED DECEMBER 31, 2017, AND DECEMBER 31, 2016



OAK BROOK, ILLINOIS

## FOR THE YEARS ENDED DECEMBER 31, 2017 & DECEMBER 31, 2016

### **PREPARED BY**

The Finance Department of the Illinois Municipal Retirement Fund

### **OAK BROOK OFFICE**

2211 York Road, Suite 500, Oak Brook, IL 60523-2337

## SPRINGFIELD REGIONAL COUNSELING CENTER

3000 Professional Drive, Suite 101, Springfield, IL 62703-5934

### **CONTACT IMRF**

1-800-ASK-IMRF (275-4673) www.imrf.org

### **Brian Collins**

Executive Director

## **IMRF MISSION STATEMENT**

TO EFFICIENTLY AND IMPARTIALLY DEVELOP, IMPLEMENT, AND ADMINISTER PROGRAMS THAT PROVIDE INCOME PROTECTION TO MEMBERS AND THEIR BENEFICIARIES ON BEHALF OF PARTICIPATING EMPLOYERS IN A PRUDENT MANNER.



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## **BOARD OF TRUSTEES**

The IMRF Board of Trustees is responsible for the prudent management of IMRF's retirement assets, and for making sure the money is there to pay the benefits earned by every IMRF member and beneficiary, now and for years to come. The Board carries the responsibility to ensure that IMRF continues to be a well-run, successful pension fund.

An eight-member Board of Trustees governs IMRF:

- Four Executive Trustees elected by participating units of government
- Three Employee Trustees elected by participating IMRF members
- One Annuitant Trustee elected by IMRF annuitants.

The Board meets at least four times a year and may meet monthly as needed. Trustees are elected to five-year terms and serve without compensation. In their five-year term, each Trustee will have the opportunity to hold each officer position at least one time. Trustees are not subjected to term limits.

### NATALIE COPPER 2018 PRESIDENT

EMPLOYEE TRUSTEE

Current term ending Dec. 31, 2019

Dawes School in Evanston



## ALEX WALLACE, JR. 2018 SECRETARY

**EMPLOYEE TRUSTEE** 

Current term ending Dec. 31, 2020

Oswego Community Unit School District 308



## DAVID MILLER 2018 VICE PRESIDENT EXECUTIVE TRUSTEE

EXECUTIVE TRUSTEE

Current term ending Dec. 31, 2021

North Shore Water Reclamation District

### TRUDY WILLIAMS

**EMPLOYEE TRUSTEE** 

Current term ending Dec. 31, 2020

Fulton County State's Attorney's Office



## **GWEN HENRY**EXECUTIVE TRUSTEE

Current term ending Dec. 31, 2020

DuPage County

### **SHARON U. THOMPSON**

ANNUITANT TRUSTEE

Current term ending Dec. 31, 2020

Formerly Lee County



## TOM KUEHNE EXECUTIVE TRUSTEE

Current term ending Dec. 31, 2022

Village of Arlington Heights



## SUE STANISH EXECUTIVE TRUSTEE

Current term ending Dec. 31, 2018

Naperville Park District

## **IMRF DIRECTORS**



\*Listed from left to right.

**BACK ROW\*** 

### **DHVANI SHAH**

Chief Investment Officer

### **MARK NANNINI**

**Chief Financial Officer** 

### **KEYLA VIVAS**

**Chief Information Services Officer** 

### **BETH JANICKI CLARK**

**General Counsel** 

**FRONT ROW\*** 

### **DAN DUQUETTE**

**Deputy Executive Director** 

### **BRIAN COLLINS**

**Executive Director** 



## **ORGANIZATION CHART**

### **BOARD OF TRUSTEES**

### CONSULTANTS

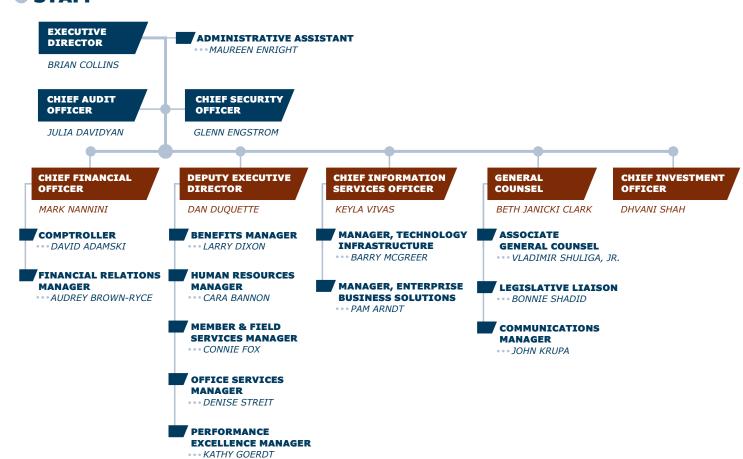
INVESTMENT CONSULTANTS

INVESTMENT MANAGERS MASTER TRUSTEE EXTERNAL AUDITOR

ACTUARY

MEDICAL
CONSULTANTS

### STAFF



### Consultants – Investment Consultants are listed on pages 55-57

External Auditors Master Trustee Medical Consultants Adjudicators Actuary Gabriel, Roeder, RSM US LLP The Northern Trust Marianjoy Medical Group Ottosen Britz Kelly Gilbert Smith & Company Joseph Evans Kimberly Miller Wheaton, Illinois & Dinolfo, LTD Brian B. Murphy, F.S.A. William Sarb Senior Vice President Northwest Psychiatric, S.C. Susan Davis Brunner, LLC Chicago, Illinois Mark Buis, F.S.A. Schaumburg, Illinois Buffalo Grove, Illinois Southfield, Michigan



Government Finance Officers Association

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### Illinois Municipal Retirement Fund

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

December 31, 2016

Christopher P. Morrill

Executive Director/CEO



2211 York Road, Suite 500 Oak Brook, IL 60523-2337 1-800-ASK-IMRF (275-4673)

www.imrf.org

May 18, 2018

Board of Trustees Illinois Municipal Retirement Fund Oak Brook, Illinois 60523-2337

### **FORMAL TRANSMITTAL**

We are pleased to submit the Comprehensive Annual Financial Report of the Illinois Municipal Retirement Fund (IMRF) for the year ended December 31, 2017. The management of IMRF is responsible for the compilation and accuracy of the financial, investment, actuarial, and statistical information contained in this report. To the best of our knowledge and belief, the enclosed information is accurate in all material respects and is reported in a manner designed to fairly present the fiduciary net position and changes in the fiduciary net position of IMRF.

In developing and evaluating IMRF's accounting system, we consider the adequacy of internal accounting controls. We design these controls to provide reasonable assurance regarding the safekeeping of assets and the reliability of financial records. Because the cost of internal control should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements.

IMRF's Internal Audit department is comprised of seven full-time employees, including a Chief Audit Officer. The Internal Audit department uses a detailed internal audit program that encompasses examination of internal controls, employer compliance, and the Fund's financial transactions and records. IMRF engages an independent accounting firm annually to review and test internal controls over our information systems.

The internal audit function reports directly to the Executive Director and the Board of Trustees. The Board of Trustees has established an Audit Committee, comprised of three Board members. Annually, the Chief Audit Officer presents a report to the Audit Committee covering the results of internal audit procedures performed. The Chief Audit Officer may also meet with the committee on an as-needed basis. Again this year, the Chief Audit Officer reported that IMRF's system of internal controls appears adequate and is being adhered to in the areas tested.

Annually IMRF completes a SOC 1 Type 2 (System and Organization Controls) attestation report for distribution to employers and their auditors to comply with GASB Statement No. 68, Accounting and Financial Reporting for Pensions. A SOC 1 Type 2 attestation tests controls related to the accuracy of financial data and the information technology used to produce the financial data. The unmodified opinion in the report allows an employer's auditor confidence that the proper controls are in place and administered on a consistent basis each day of the year and that the financial information is accurate.

The Illinois Pension Code requires an annual audit of the financial statements of the Fund by independent certified public accountants selected by the Board of Trustees and approved by the State Auditor General. IMRF satisfied this requirement and the independent accountants' unmodified report on IMRF's 2017 Financial Statements is included in this report. The independent accountants meet at least twice a year with the Audit Committee—once to report on the planned scope of their audit and a second time to report on its results.

### PROFILE OF IMRF

IMRF is the administrator of an agent multiple-employer public employee retirement system. The Illinois State Legislature established IMRF in 1939. It began operations in 1941 in order to provide retirement, death, and disability benefits to employees of local units of government in Illinois. Members, employers, and annuitants elect eight trustees who govern IMRF. IMRF is separate and apart from the Illinois state government and is not included in the state's

financial statements. IMRF now serves 2,997 different employers, 175,565 participating members, and 128,264 benefit recipients. The Illinois Pension Code requires IMRF to provide its financial statements to participating employers and to any participating member who requests them. These financial statements also appear on IMRF's website, www.imrf.org.

### **ECONOMIC CONDITIONS**

### SUMMARY OF FINANCIAL INFORMATION

The following table summarizes additions and deductions to the Fund's fiduciary net position for 2017 and 2016.

	2017 (millions)	2016 (millions)	Dollar Change (millions)	Percent Change
Additions	\$7,015.5	\$3,979.2	\$3,036.3	76.3%
Deductions	2,117.2	1,977.4	139.8	7.1%
Net Change	\$4,898.3	\$2,001.8	\$2,896.5	144.7%

The increase in Additions between 2017 and 2016 is primarily due to a \$3,053 million increase in investment income. The financial markets in 2017 were impacted by optimism in the markets, a steadily growing economy, changes to the federal tax structure, and moderate inflation. The increase in Deductions is primarily due to increased benefit payment amounts and an increase in the number of benefit recipients from 123,206 to 128,264. For a full understanding of IMRF's financial results, you are encouraged to review the "Financial" section of this report, which includes the Independent Auditor's Report, Management's Discussion and Analysis, Financial Statements, and other supplemental information. Management's Discussion and Analysis provides a narrative introduction, overview, and analysis of the financial statements and complements this transmittal letter.

### **FUNDING**

The funding of IMRF is comprised of three components. The first is member contributions of either 4.5% (Regular plan) or 7.5% (SLEP and ECO plans) of the covered wages established by the Illinois Pension Code. The second portion of the funding is employer contributions. These contributions are based on an individual rate calculated for each employer annually by our actuary. It is based on each employer's member demographics, wages, and experience. The final and most important component of funding the plan is investment income. IMRF has advocated for a 100% funding goal as it, in the long run, is the most cost efficient for our employers. For additional information on investments, see the "Investments" section.

IMRF's actuary uses a five-year smoothed market-related value with a 20% corridor to determine the actuarial value of assets. The smoothing is intended to prevent extreme volatility in employer contribution rates due to short-term fluctuations in the investment markets. For the December 31, 2017, valuation, the aggregate actuarial value of assets was \$39.2 billion. The aggregate actuarial liability for all IMRF employers was \$42.2 billion. The aggregate actuarial funding ratio is currently 92.9% (an increase from the 2016 ratio of 88.9%). If the market value of assets is used (i.e., no actuarial smoothing), the aggregate funding ratio is 98.2% as of December 31, 2017, an increase from 88.3% as of December 31, 2016. The reason for the difference between the two ratios is due to the five-year smoothing of gains and losses in the actuarial funding ratio while the market funding ratio reflects the immediate impact of investment gains and losses. As of December 31, 2017, IMRF's market-based funding value change was higher than the actuarial funding value since there were \$2,125 million of unrecognized actuarial investment gains, which will be reflected in the 2018 through 2021 period in keeping with the five-year actuarial smoothing technique discussed above.

The preceding ratios are for the Fund as a whole. Under the Illinois Pension Code, each employer funds the pensions for its own employees. Funding ratios for individual employers and individual plans vary widely. IMRF members can look with a sense of security to the net position base since these assets are irrevocably committed to the payment of their pensions when they retire. The actuary has determined that the present net position base, expected future contributions,



and investment earnings thereon are sufficient to provide for full payment of future benefits under the level payroll percentage method of funding. The "Actuarial" section of this report contains the actuary's letter and further information on IMRF's funding. The funding policy was last reviewed by the IMRF Board of Trustees in December 2017 with new mortality tables being adopted for the 2017 valuation. Additional adjustments to the actuarial tables and assumptions will be adopted by IMRF for the 2018 valuation.

### **INVESTMENTS**

The investment portfolio is a major contributor to the Fund. Year 2017 investment returns resulted in a gain of \$5,718 million and represented 81.5% of Plan Additions for the year. In the past five years—2013 through 2017—investment income represented the following percentage of Additions to fiduciary net position:

Year	Percentage of Additions
2017	81.5%
2016	67.0%
2015	13.7%
2014	61.1%
2013	81.5%

IMRF's primary goal is to optimize the long-term total return of the Fund's investments through a policy of diversification within a parameter of prudent risk, as measured on the total portfolio. Currently, the public markets portfolio is managed by 40 professional investment management firms handling 44 mandates. The private markets portfolio is invested with 47 investment firms across 109 separate funds. These firms make investment decisions under the Prudent Man Rule, authorized by Article 1 of the Illinois Pension Code and by investment policy guidelines adopted by the Board of Trustees.

The Board employs an Investment Consultant to assist staff in the development and evaluation of IMRF's strategic asset allocation, asset liability modeling study, and investment policy statements. The Investment Consultant also assists with the selection of investment management firms and in the monitoring and evaluation of investment manager performance.

The "Investments" section of this report contains a summary of IMRF's investment portfolio, investment performance, the Investment Consultant's report, the Master Trustee's report, and a summary of the investment objectives and policies.

### CURRENT AND FUTURE DEVELOPMENTS

### A. BOARD OF TRUSTEES

Tom Kuehne, who has served as Trustee since 2013, was elected to his second term as Executive Trustee. His second term will run from January 1, 2018, through December 31, 2022.

### B. LEGISLATIVE ACTIVITY APPLICABLE TO IMRF (PASSED IN 2017)

Seven bills that affect IMRF passed the General Assembly in 2017:

**Public Act 100-148** Clarifies that members may make one payment for past service purchases after terminating employment in an IMRF position, as long as the application is made prior to termination. This law became effective August 18, 2017.

**Public Act 100-274:** Sets the hourly standard for all governing body members, whether elected or appointed, at 1,000 hours. This law is applicable only to members who begin participation as a member of a governing body after the effective date of the bill. This became effective January 1, 2018.

**Public Act 100-411:** Excludes vehicle allowances from the definition of reportable wages for members who first begin participation on or after the effective date. Also excludes vacation payouts from the accelerated payment calculation, but only if the payment was made in the final three months of the Final Rate of Earnings (FRE) period. This law became effective August 25, 2017.

**Public Act 100-281:** In the provision applicable to IMRF, it excludes new police chiefs in Article 3 communities from opting into IMRF SLEP as of January 1, 2019. Only applicable to chiefs who have earned no IMRF service credit prior to that date.

**Public Act 100-139:** Requires members to be vested in IMRF in order to qualify as a candidate for the IMRF Board of Trustees and also clarifies that the Accelerated Payment is applicable to increases in "reported earnings" rather than "salary." This became effective August 18, 2017.

**Public Act 100-354:** Allows the Village of Bedford Park to allow their police and/or fire employees to participate in IMRF SLEP. The bill was effective August 25, 2017, but the change will only be applicable after the village requests a cost study from IMRF regarding the potential cost of the change and also passes a resolution to allow the switch.

**Public Act 100-352:** Requires all investment consultants to make certain information regarding searches and Minority, Woman, and Disabled Owned Businesses (MWBE) managers available to the fund annually, beginning January 1, 2018. To the extent within the bounds of financial and fiduciary prudence, this information must be included as a determining factor in issuing the contract. Investment consultants must also disclose annually all compensation and economic opportunities received in the past 24 months from any investment advisor retained by the Fund. No contract for investment consulting services issued after that date may be issued without this disclosure. This law became effective November 8, 2017.

### C. SYSTEMS DEVELOPMENT

IMRF's major 2017 system development priorities focused on:

- Continuing the Horizon Project system implementation, including vendor selection, project initiation, and requirements confirmation.
- Re-engineering business processes to achieve IMRF's Customer Service Goals, while also maintaining all internal control and efficiency objectives.
- Deploying a new intranet (COMPASS), including improved tools and information.

IMRF's major 2018 system development priorities will focus on:

- Continuing the Horizon Project system implementation, including Phase 2 "Design for Gaps," Phase 3 "Purchase and Installation of Software and Hardware," and the initiation of Phase 4 "Build and Deploy."
- Developing and issuing a comprehensive Request for Proposal (RFP) for the implementation of enhanced Telephony tools to be integrated with Horizon functionality to support IMRF's Customer Service Goals, some components to be implemented in production during 2018.
- SAN disk storage replacement to improve Business Continuity by having real time replication of data and developing and issuing a comprehensive RFP to find a new Disaster Recovery facility to partner with.
- Replacement of all staff desktop computers and roll out of Microsoft Windows 10 across the entire organization.



### D. INVESTMENT ACTIVITIES

On March 1, 2018, IMRF staff and its consultant presented the 2018 Asset Allocation Review to the Investment Committee of the IMRF Board of Trustees. New asset allocation targets were approved by the Board and became effective March 1, 2018. The 2017 and 2018 asset allocation targets are listed in the table below:

Asset Class	2017 Target	2018 Target
U.S. Equities	38%	37%
International Equities	16%	18%
Fixed Income	29%	28%
Real Estate	8%	9%
Alternative Investments	8%	7%
Cash	1%	1%

Major investment activities in 2017 through March 31, 2018, were as follows:

- The IMRF Investment Committee Charter, Statement of Investment Policy, and Real Estate Statement of Investment Policy were revised by staff and approved by the Board.
- Additional commitments were made to six follow-on funds of five existing real estate managers.
- Additional commitments were made to three existing funds of two current real estate managers.
- New commitments were made to two new real estate firms.
- Additional commitments were made to eleven follow-on funds of eight existing private equity managers.
- New commitments were made to four new private equity firms.
- New commitments were made to two new unlisted infrastructure firms.
- Public market investment manager terminations consisted of one micro-cap value domestic equity portfolio, one core-plus fixed income portfolio, and one large-cap growth domestic equity portfolio.
- Additional allocations were funded to three existing core fixed income portfolios and to one existing fixed income index fund.
- New commitments were made to two new listed infrastructure firms and one Minority, Woman, and Business Enterprise (MWBE) passive equity index fund.
- A mandate for one core-plus fixed income portfolio was converted to a core fixed income mandate.
- Funds were withdrawn from one passively-managed international equity index fund and one passively-managed
  domestic equity index fund. These monies were used to fund an additional allocation to a newly-converted core
  mandate for an existing fixed income portfolio, and for a new allocation to a new MWBE passively managed
  domestic equity index fund.
- Finally, the 2018 Asset Allocation Review presented by staff and the consultant was approved by the Board. It resulted in the establishment of the asset allocation targets for the investment portfolio which became effective March 1, 2018.

### E. STRATEGIC PLAN

IMRF's Strategic Plan provides the Fund with a road map for meeting the challenges and opportunities in achieving our Vision to provide the highest quality retirement services to our members, their beneficiaries, and employers in a cost-effective manner. The Plan guides our efforts to continuously improve customer service to our employers and members.

The 2017-2019 IMRF Strategic Plan includes elements of the *Baldrige Criteria for Performance Excellence* to ensure we align our objectives, processes, and resources with our Vision. IMRF staff implemented a series of action plans that support our four Strategic Objectives during 2017. We include the following four key result areas on our leadership scorecard to measure our progress towards meeting our objectives:

· Financial Health

Customer Engagement

• Workforce Engagement

• Operational Excellence

IMRF sets out to achieve top decile performance in each key area of importance.

### F. ILLINOIS PERFORMANCE EXCELLENCE

IMRF is proud to be the recipient of the 2017 Illinois Performance Excellence (ILPEx) Gold Award for "Achievement of Excellence."

ILPEx is a non-profit organization that seeks to help organizations improve their performance by utilizing the *Baldrige Criteria for Performance Excellence* and aligning their processes to become more efficient and sustainable. Organizations that pursue the Baldrige management framework can demonstrate through the ILPEx award application that they have adopted proven performance practices, principles, and strategies that nurture excellence in all aspects of their operations. This can range from customer relations to workforce engagement to specific operational and financial results. The comprehensive feedback report received from ILPEx provides additional guidance on how IMRF can further leverage our strengths and pursue opportunities for improvement.

Achieving the highest level of recognition at a state level qualifies IMRF to apply at the national level via the Malcolm Baldrige National Quality Award (MBNQA). Established by Congress in 1987, the MBNQA was designed to raise awareness of quality management and to recognize US organizations that have implemented successful quality-management systems. IMRF



submitted an application to MBNQA in April 2018. This application demonstrates IMRF's continued dedication to delivering excellent customer service to our members, retirees, and employers by continuing our journey to maintain excellence using the *Baldrige Criteria for Performance Excellence*.

### G. DEFINED BENEFIT ADMINISTRATION BENCHMARKING ANALYSIS

CEM Benchmarking Inc. conducts an annual Defined Benefit Administration Benchmarking Analysis for public pension systems. IMRF has participated in this benchmarking program since 2001. This program provides insight into benefit administration costs, customer service levels, and industry best practices. IMRF's total service score was in the top 15%, while our costs were below the median, as compared to our peer group of 42 public systems in the United States and Canada. IMRF will continue to participate in this benchmarking program, as it is an important part of our continuous process improvement program.

### REPORTS TO MEMBERSHIP

IMRF issued a variety of reports covering 2016 and 2017 activity. We provided Employer Statements every month. We issued Annuitant Statements in November 2017, Active Member Statements in February 2018, and Inactive Member Statements in March 2018. We will include a summary of this Annual Report for members and retirees in *Fundamentals*, IMRF's member newsletter. We will advise Authorized Agents in May 2018 that this report, as well as our Popular Annual Financial Report, is available on our website, www.imrf.org.



### ADDITIONAL AWARDS AND ACKNOWLEDGEMENTS

### **AWARDS**

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to IMRF for its Comprehensive Annual Financial Report for the year ended December 31, 2016. IMRF has received a Certificate of Achievement from the GFOA for the last 37 consecutive years (fiscal years 1980-2016).

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized Comprehensive Annual Financial Report, whose contents conform to program standards. Such a report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe our current report continues to conform to the Certificate of Achievement program requirements, and we will submit it to the GFOA. The Certificate of Achievement is a prestigious national award, recognizing conformance with the highest standards for preparation of state and local government financial reports.

IMRF also received a Certificate of Achievement for Excellence in Financial Reporting for its Popular Annual Financial Report for the year ended December 31, 2016.

IMRF received the GFOA Distinguished Budget Award for its 2017 budget. The Government Finance Officers Association of the United States and Canada (GFOA) awarded, the Distinguished Budget Presentation Award for the third consecutive time to IMRF. The award is for a one year period. IMRF will apply again for this prestigious award for the 2018 budget document.

In 2017, in recognition of meeting professional standards for plan administration and funding as set forth in the Public Pension Standards, IMRF was awarded for plan funding and administration by the Public Pension Coordinating Council, a confederation of the National Association of Retirement Administrators, the National Conference on Public Employee Retirement Systems, and the National Council on Teacher Retirement.

### **ACKNOWLEDGEMENTS**

The production of this report reflects the combined effort of the IMRF staff under the leadership of the Board of Trustees and the Executive Director, Brian Collins. The Finance department, under the direction of Mark Nannini, compiled the report. We believe this report provides complete and reliable information for making management decisions, for determining compliance with legal provisions, and for determining responsible stewardship for the assets contributed by our members and their employers.

We make this report available to the Authorized Agents of all participating units of government. The Authorized Agents form the link between IMRF and its membership. Their cooperation, for which we are thankful, contributes significantly to the success of IMRF. We hope they will find this report both informative and helpful.

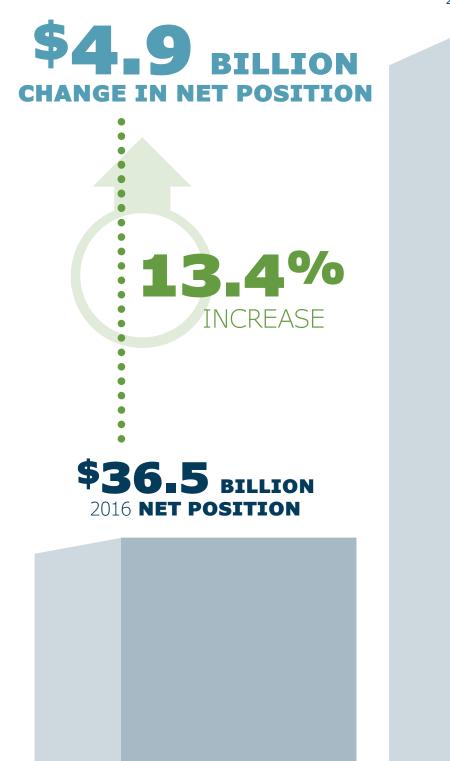
Brian Collins
Executive Director

Mark F. Nannini Chief Financial Officer

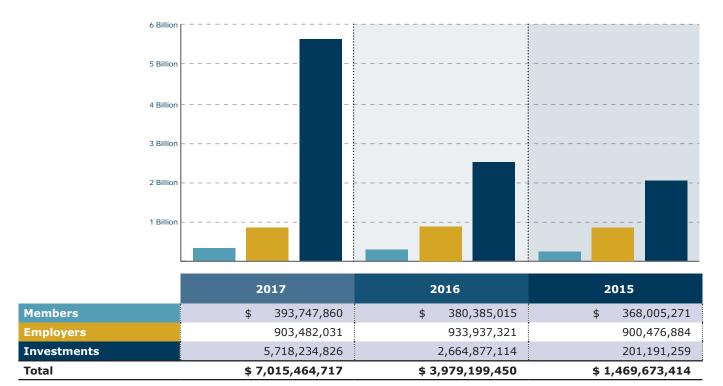
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### 2017 FINANCIAL RESULTS

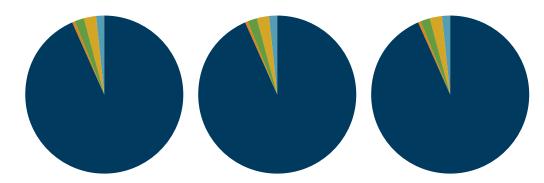
## \$41.4 BILLION 2017 NET POSITION



### **REVENUES BY SOURCE**



### **EXPENSES BY TYPE**



	2017	2016	2015
Annuities	\$ 2,005,490,975	\$ 1,862,661,433	\$ 1,720,618,375
Disability	9,451,533	9,707,497	9,794,297
Death	28,671,149	29,770,969	27,771,686
Refunds	42,552,060	37,690,098	36,748,509
Administrative	31,031,320	37,550,066	28,707,981
Total	\$ 2,117,197,037	\$ 1,977,380,063	\$ 1,823,640,848

## **FINANCIAL**

- 18. Independent Auditor's Report
- **20.** Management's Discussion and Analysis

### **BASIC FINANCIAL STATEMENTS**

- 24. Statements of Fiduciary Net Position
- 25. Statements of Changes in Fiduciary Net Position
- **26.** Notes to Basic Financial Statements\*

  \*The Notes are an integral part of the Basic Financial Statements.

### SUPPLEMENTARY INFORMATION

- **49.** Required Supplementary Information
- **49.** Supplementary Information

## STRENGTH



**Strength**. Locally funded and financially sound, IMRF's top priority is and always will be to provide the best retirement services to our members. IMRF's strength stems from our enduring commitment to securing the financial futures of public employees in Illinois. From our first investment in 1941—a \$5,000 U.S. Treasury Bond—to today's global and diverse investment portfolio of more than \$41.4 billion, IMRF continues to be a leader in the public pension industry.





RSM US LLP

#### **Independent Auditor's Report**

The Board of Trustees
Illinois Municipal Retirement Fund

### Report on the Financial Statements

We have audited the accompanying Statements of Fiduciary Net Position of the Illinois Municipal Retirement Fund (the Fund), as of December 31, 2017 and 2016, and the related Statements of Changes in Fiduciary Net Position for the years then ended, and the related notes to the 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 audits. We conducted our audits 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, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Illinois Municipal Retirement Fund as of December 31, 2017 and 2016, and the changes in fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

THE POWER OF BEING UNDERSTOOD AUDIT | TAX | CONSULTING



### 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 20 through 23 and the schedule of money-weighted rate of returns on page 49 be presented to supplement the 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 financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the 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 December 31, 2017 was conducted for the purpose of forming an opinion on the Fund's financial statements. The other supplementary information consisting of Supporting Schedules in the financial section, and the accompanying introductory, investments, actuarial, and statistical sections are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The other supplementary information for the years ended December 31, 2017 and 2016 is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The other supplementary information has been subjected to the auditing procedures applied in the audit of the financial statements for the years ended December 31, 2017 and 2016 and certain additional procedures, including comparing and reconciling such information directly to underlying accounting and other records used to prepare the financial statements, or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplementary information is fairly stated in all material respects, in relation to the financial statements as a whole for the years ended December 31, 2017 and 2016.

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

RSM US LLP

Schaumburg, Illinois May 18, 2018

### **MANAGEMENT'S DISCUSSION AND ANALYSIS**

The following Management's Discussion and Analysis (MD&A) of the Illinois Municipal Retirement Fund's (IMRF or the "Fund") financial performance provides an introduction to the financial statements of IMRF for the years ended December 31, 2017 and 2016. Since the MD&A is designed to focus on current activities, resulting changes, and current known facts, please read it in conjunction with the transmittal letter (pages 7-13), the financial statements and notes, required supplementary information, and supplementary information.

### REQUIRED FINANCIAL STATEMENTS

IMRF, an agent multiple-employer public employee retirement system, prepares its financial statements on an accrual basis in accordance with Generally Accepted Accounting Principles promulgated by the Governmental Accounting Standards Board (GASB). The Statements of Fiduciary Net Position include all of IMRF's assets and liabilities and provides information about the nature and amount of investments available to satisfy the pension benefits of the Fund. All additions to and deductions from the net position held in trust for pension benefits are accounted for in the Statements of Changes in Fiduciary Net Position. These statements measure IMRF's success over the past year in increasing the fiduciary net position available for pension benefits.

### FINANCIAL ANALYSIS OF IMRF

In 2017, contributions of \$1,297 million and investment income of \$5,718 million exceeded the deductions to the fiduciary net position of \$2,117 million by \$4,898 million. This net increase brought the Fund's fiduciary net position to \$41.4 billion.

### FIDUCIARY NET POSITION

To begin the financial analysis, summarized comparisons of IMRF's Fiduciary Net Position for 2017 versus 2016 and 2016 versus 2015 are presented below.

### **CONDENSED STATEMENTS OF FIDUCIARY NET POSITION** (IN MILLIONS)

	2017	2016	Dollar Change	Percent Change
Cash and cash equivalents	\$ 1.6	\$ 0.8	\$ 0.8	100.0%
Receivables and prepaids	394.5	485.4	(90.9)	(18.7)
Investments	41,214.8	36,364.3	4,850.5	13.3
Invested securities lending cash collateral	350.7	361.2	(10.5)	(2.9)
Capital assets, net	15.2	11.8	3.4	28.8
Total assets	41,976.8	37,223.5	4,753.3	12.8
Liabilities	563.6	708.6	(145.0)	(20.5)
Fiduciary net position	\$ 41,413.2	\$ 36,514.9	\$ 4,898.3	13.4%

As the table shows, fiduciary net position increased by \$4,898 million (13.4%) in 2017.

This increase reflects the robust investment returns in 2017. The decrease in receivables and prepaids in 2017 is largely due to the decrease in the receivable from brokers for unsettled trades at year-end due to a smaller number of trades outstanding at year-end 2017 compared to 2016. The decrease in liabilities in 2017 is due primarily to the decrease in the payables to brokers for unsettled trades at year-end 2017.



The following table presents the investment allocation as of year-end 2017 and 2016 as compared to IMRF's target allocation.

	2017	Target	2016
Domestic equity	43.3%	38.0%	43.4%
International equity	20.6	16.0	18.7
Fixed income	27.0	29.0	28.2
Real estate	5.3	8.0	5.5
Alternative	3.5	8.0	3.8
Short-term	0.3	1.0	0.4

The variance in the real estate allocation is due to the fact that IMRF is in the process of recapitalizing its real estate portfolio, and actual investments trail commitments. IMRF is also looking to increase its allocation to alternative investment strategies. The current target allocations were reconfirmed during Investment Committee meetings in 2017. IMRF continuously monitors its actual investment allocations in relation to its targets and rebalances as appropriate.

### **CONDENSED SUMMARY OF FIDUCIARY NET POSITION (IN MILLIONS)**

	2016	2015	Dollar Change	Percent Change
Cash and cash equivalents	\$ 0.8	\$ 1.7	\$ (0.9)	(52.9)%
Receivables and prepaids	485.4	426.1	59.3	13.9
Investments	36,364.3	34,349.9	2,014.4	5.9
Invested securities lending cash collateral	361.2	948.2	(587.0)	(61.9)
Capital assets, net	11.8	21.9	(10.1)	(46.1)
Total assets	37,223.5	35,747.8	1,475.7	4.1
Liabilities	708.6	1,234.7	(526.1)	(42.6)
Fiduciary net position	\$ 36,514.9	\$ 34,513.1	\$ 2,001.8	5.8%

As the table shows, fiduciary net position increased by \$2,002 million (5.8%) in 2016.

The increase reflects the investment returns in 2016. The increase in the receivables and prepaids in 2016 is largely due to the increase in the receivables from brokers for unsettled trades at year-end due to a larger number of trades outstanding at year-end 2016 compared to 2015. The decrease in liabilities in 2016 is due primarily to the decrease in the securities lending cash.

### CHANGES IN FIDUCIARY NET POSITION

Summarized comparisons of IMRF's Changes in Fiduciary Net Position for 2017 versus 2016 are presented below.

## CONDENSED SUMMARY OF CHANGES IN FIDUCIARY NET POSITION (IN MILLIONS)

	2017	2016	Dollar Change	Percent Change
Additions				
Member contributions	\$ 393.7	\$ 380.4	\$ 13.3	3.5%
Employer contributions	903.5	933.9	(30.4)	(3.3)
Net investment gain	5,718.3	2,664.9	3,053.4	114.6
Total additions	7,015.5	3,979.2	3,036.3	76.3
Deductions				
Benefits	2,043.6	1,902.1	141.5	7.4
Refunds	42.6	37.7	4.9	13.0
Administrative expenses	31.0	37.6	(6.6)	(17.6)
Total deductions	2,117.2	1,977.4	139.8	7.1
Net increase in fiduciary net position	\$ 4,898.3	\$ 2,001.8	\$ 2,896.5	144.7%

### **ADDITIONS**

Additions needed to fund benefits are accumulated through contributions and returns on invested funds. Contributions for 2017 totaled \$1,297 million which was 1.3% less than 2016. The decrease reflects the decrease in employer contribution rates for 2017. The member contribution rate remained at 4.5% of earnings for Regular members and 7.5% for Sheriff's Law Enforcement Personnel (SLEP) and the optional Elected County Official (ECO) members. For rate-setting purpose there is a two-year lag between the date that data is used to compute employer contribution rates and the effective date of those rates.

Investment returns for 2017 were 15.7%, significantly higher than the 2016 return. The \$5,718 million investment gain in 2017 represents a \$3,053 million change from the \$2,665 million gain in 2016. IMRF's 2017 total investment portfolio return was up due to strong markets throughout 2017.

In 2017, IMRF had net appreciation in the value of investments of \$5,024 million, a \$2,986 million change from the \$2,038 million of appreciation recorded in 2016. Interest, dividends, and equity fund income totaled \$801 million, an increase from \$730 million in 2016. Securities lending income net of related expenses was \$9.8 million for 2017, a decrease of \$0.4 million from 2016. Direct investment expenses increased to \$116.1 million in 2017 from \$112.5 million in 2016.

The total rate of return for the portfolio in 2017 was 15.7% compared to 7.8% in 2016. IMRF's US stock portfolio returned 19.6% compared to 21.1% for the custom benchmark. The fixed income portfolio returned 4.7% compared to 3.5% for the Bloomberg Aggregate Bond Index. Our international stock portfolio returned 27.5% compared to 27.2% for the MSCI All-Country World Index ex-US. The real estate portfolio returned 9.1% compared to 6.7% for the custom benchmark. The alternative investment portfolio returned 12.2%.

### **DEDUCTIONS**

The expenses paid by IMRF include benefit payments, refunds, and administrative expenses. Expenses for 2017 totaled \$2,117 million, an increase of \$140 million over 2016. The increase in benefit payments to members and beneficiaries resulted primarily from growth in the number of annuitants to 128,264 in 2017 from 123,206 in 2016, as well as an increase in the amount of the average benefit.



## CONDENSED SUMMARY OF CHANGES IN FIDUCIARY NET POSITION (IN MILLIONS)

	2016	2015	Dollar Change	Percent Change
Additions				
Member contributions	\$ 380.4	\$ 368.0	\$ 12.4	3.4%
Employer contributions	933.9	900.5	33.4	3.7
Net investment gain	2,664.9	201.2	2,463.7	1224.5
Total additions	3,979.2	1,469.7	2,509.5	170.7
Deductions				
Benefits	1,902.1	1,758.2	143.9	8.2
Refunds	37.7	36.8	0.9	2.4
Administrative expenses	37.6	28.7	8.9	31.0
Total deductions	1,977.4	1,823.7	153.7	8.4
Net increase in fiduciary net position	\$ 2,001.8	\$ (354.0)	\$ 2,355.8	NM

NM - Not Meaningful

### **ADDITIONS**

Additions needed to fund benefits are accumulated through contributions and returns on invested funds. Contributions for 2016 totaled \$1,314 million which was 3.6% more than 2015. The increase reflects an increase in employer contribution rates as well as an increase in pensionable wages. The member contribution rate remained at 4.5% of earnings for Regular members and 7.5% for Sheriff's Law Enforcement Personnel (SLEP) and the optional Elected County Official (ECO) members. For rate-setting purpose there is a two-year lag between the date that data is used to compute employer contribution rates and the effective date of those rates.

Investment returns for 2016 were 7.8%, significantly higher than the 2015 return. The \$2,665 million investment gain in 2016 represents a \$2,464 million change from the \$201 million gain in 2015. IMRF's 2016 total investment portfolio return was up due to strong markets throughout 2016.

In 2016, IMRF had net appreciation in the value of investments of \$2,038 million, a \$2,372 million change from the \$(334) million of depreciation recorded in 2015. Interest, dividends, and equity fund income totaled \$730 million, an increase from \$640 million in 2015. Securities lending income net of related expenses was \$10.2 million for 2016, a decrease of \$2.4 million from 2015. Direct investment expenses decreased to \$112.5 million in 2016 from \$117.8 million in 2015.

The total rate of return for the portfolio in 2016 was 7.8% compared to 0.2% in 2015. IMRF's U.S. stock portfolio returned 12.4% compared to 21.3% for the Russell 2000 index. The fixed income portfolio returned 4.7% compared to 2.7% for the Barclays Aggregate Bond Index. Our international stock portfolio returned 3.2% compared to 4.5% for the MSCI All-Country World Index ex-US. The real estate portfolio returned 9.0% compared to 7.8% for the NCREIF Property Index. The alternative investment portfolio returned 5.1%.

### **DEDUCTIONS**

The expenses paid by IMRF include benefit payments, refunds, and administrative expenses. Expenses for 2016 totaled \$1,977 million, an increase of \$153 million over 2015. The increase in benefit payments to members and beneficiaries resulted primarily from growth in the number of annuitants to 123,206 in 2016 from 118,038 in 2015, as well as an increase in the amount of the average benefit.

### MONEY-WEIGHTED RATE OF RETURN

When comparing returns it is important to remember that as a pension fund, IMRF's investment program has a very long time horizon. See the "Investments" section for details of some of the longer term results. IMRF's money-weighted rate of return of the periods ending:

Period	Return
December 31, 2017	15.93%
December 31, 2016	7.84%
December 31, 2015	0.58%

### STATEMENTS OF FIDUCIARY NET POSITION

	Years Ended December 31			
	2017	2016		
Assets				
Cash and cash equivalents	\$ 1,542,479	\$ 738,052		
Receivables and prepaid expenses				
Contributions	92,172,658	94,694,336		
Investment income	80,218,166	78,827,907		
Receivables from brokers for unsettled trades	69,442,053	170,199,183		
Prepaid expenses	152,653,034	141,675,535		
Total receivables and prepaid expenses	394,485,911	485,396,961		
Investments, at fair value				
Fixed income	10,806,624,652	10,005,826,815		
Stocks	25,888,519,850	22,224,091,718		
Short-term investments	653,971,578	720,783,465		
Real estate	2,550,292,616	2,275,758,558		
Private equity	1,315,391,576	1,137,835,324		
Total investments	41,214,800,272	36,364,295,880		
Invested securities lending cash collateral	350,734,959	361,207,072		
Capital assets				
Equipment, at cost	30,078,680	24,628,992		
Accumulated depreciation	(14,882,879)	(12,808,873)		
Total capital assets	15,195,801	11,820,119		
Total assets	41,976,759,422	37,223,458,084		
Liabilities				
Accrued expenses and benefits payable	29,245,873	26,276,096		
Securities lending cash collateral	350,734,959	361,207,072		
Payables to brokers for unsettled trades	183,613,111	321,077,117		
Total liabilities	563,593,943	708,560,285		
Net position restricted for pensions	\$ 41,413,165,479	\$ 36,514,897,799		

The accompanying notes are an integral part of the financial statements.



### STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

	Years Ended	December 31
	2017	2016
Additions		
Contributions		
Members for retirement coverage	\$ 393,747,860	\$ 380,385,015
Employers for benefit plan coverage	903,482,031	933,937,321
Total contributions	1,297,229,891	1,314,322,336
Investment income		
From investing activities		
Interest	287,603,308	290,275,544
Dividends	321,833,838	291,370,596
Equity fund income, net	191,648,807	147,963,319
Net appreciation in fair value of investments	5,023,512,087	2,037,617,887
Investment activity gain	5,824,598,040	2,767,227,346
Less: Direct investment expense	(116,130,444)	(112,521,372)
Net investment activity gain	5,708,467,596	2,654,705,974
From security lending activity		
Securities lending income	10,487,794	10,922,862
Securities lending management fees and borrower rebates	(733,764)	(764,062)
Net security lending activity income	9,754,030	10,158,800
Total investment gain	5,718,221,626	2,664,864,774
Other	13,200	12,340
Total additions	7,015,464,717	3,979,199,450
Deductions		
Annuities	2,005,490,975	1,862,661,433
Disability benefits	9,451,533	9,707,497
Death benefits	28,671,149	29,770,969
Refunds	42,552,060	37,690,097
Administrative expenses	31,031,320	37,550,066
Total deductions	2,117,197,037	1,977,380,062
Net increase	4,898,267,680	2,001,819,388
Net position restricted for pensions		
Beginning of year	36,514,897,799	34,513,078,411
End of year	\$ 41,413,165,479	\$ 36,514,897,799

 ${\it The\ accompanying\ notes\ are\ an\ integral\ part\ of\ the\ financial\ statements}.$ 

### NOTES TO BASIC FINANCIAL STATEMENTS (December 31, 2017 and 2016)

### A. PLAN DESCRIPTION

The Illinois Municipal Retirement Fund (IMRF or the "Fund") is the administrator of an agent multiple-employer public employee retirement system. The Illinois State Legislature established IMRF to provide employees of local governments and school districts a sound and efficient retirement system. Members, employers, and annuitants elect eight trustees who govern IMRF. Four Executive Trustees are elected by employers, three Employee Trustees are elected by members, and one Annuitant Trustee is elected by annuitants. Any IMRF member who has eight years of service credit as of December 31 of the election year is eligible to be nominated to serve as a Trustee. State law authorizes the Board to make investments, pay benefits, set employer contribution rates, hire staff and consultants, and perform all necessary functions to carry out the provisions of the Illinois Pension Code. Benefit and contribution provisions are established by state law and may be amended only by the Illinois General Assembly. IMRF is administered in accordance with Illinois statutes. The statutes do not provide for termination of the plan under any circumstances.

IMRF is separate and apart from the Illinois state government and is not included in the state's financial statements. However, the Illinois Pension Code requires the Auditor General to approve appointment of independent public accountants as the external auditors.

#### FMPLOYERS

	2017	2016
Participating employers	2,997	2,987

The Illinois Pension Code specifies the units of government required to participate in IMRF and the units that may elect to join. Participation by the following units of government is mandatory:

- All counties except Cook,
- All school districts except Chicago and,
- All cities, villages and incorporated towns with a population over 5,000, other than Chicago, which do not provide Social Security or equivalent coverage for their employees before they reach a population of 5,000.

Other units of government with general taxing powers, such as townships and special districts, may elect to join. Participating instrumentalities, which include units of government without general taxing powers and not-for-profit organizations, associations, or cooperatives authorized by state statute, may participate. They must meet financial stability requirements. Units that elect to join the system may not under any circumstances terminate their participating employer status as long as they are in existence.

#### 2. MEMBERS

	2017	2016
Inactive members		
Retirees and beneficiaries currently receiving benefits	128,264	123,206
Terminated members entitled to benefits but not yet receiving them	13,775	13,366
Terminated members—non-vested	102,195	99,238
Total inactive members	244,234	235,810
Active members		
Non-vested	86,520	83,219
Vested	89,045	91,800
Total active members	175,565	175,019
Grand total	419,799	410,829



Employers must enroll employees in IMRF if the positions meet the qualifications for IMRF membership.

There are some exceptions. City hospital employees and elected officials have the option to participate. IMRF does not cover individuals in certificated teaching positions covered by the Illinois Teachers' Retirement System. Also, IMRF does not generally cover individuals performing police or fire protection duties for employers with local police and fire pension funds. Certain police chiefs may choose to participate as Sheriff's Law Enforcement Personnel (SLEP) members.

### 3. CONTRIBUTIONS

The member contribution rates–4.5% for Regular members, 7.5% for SLEP members and Elected County Official (ECO) plan members–are set by statute. The statutes require each participating employer to contribute the amount necessary, in addition to member contributions, to finance the retirement coverage of its own employees. Employer contributions for disability benefits, death benefits, and the supplemental retirement benefits are pooled. Contribution rates for disability and death benefits are set by the IMRF Board of Trustees, while the supplemental retirement benefits rate is set by statute. Costs of administering the plan are financed by investment income. Contributions are based on employer payrolls and are due on the tenth of the month, following the month of payment pursuant to the authority vested in the IMRF Board by the Illinois Pension Code.

### 4. BENEFIT PROVISIONS

Benefits are established by statute and may only be changed by the Illinois General Assembly. The benefit provisions in effect on the member's date of participation determine a member's minimum benefit while the benefit provisions in effect on the member's date of termination determine a member's maximum benefit. The following is a summary of the IMRF benefit provisions as of December 31, 2017 and 2016. The ECO plan was created by statute in 1997 and was revised in 2000. In 2010 the Illinois General Assembly passed legislation which became Public Acts 96-0889 and 96-1495. These acts created a second tier within the Regular, SLEP and ECO plans for members joining IMRF after December 31, 2010 with no prior qualifying service. On August 8, 2011, Public Act 97-0273 closed the ECO plan to new participants. A more extensive description of the plan can be found in the "Actuarial" section.

Plan	Regular Tier 1	Regular Tier 2	SLEP Tier 1	SLEP Tier 2	Original ECO	Revised ECO Tier 1	Revised ECO Tier 2
Vesting	8 years	10 years	20 years	10 years	8 years	8 years in each elected position	8 years in each elected position; 10 years in total
Minimum Age For Unreduced Benefit	35+ years of service: 55, otherwise 60	35+ years of service: 62, otherwise 67	50 with 20+ years of service	55 with 10+ years of service	Sheriffs with 20 years of SLEP service: 50, otherwise 55	Sheriffs with 20 years of SLEP service: 50, otherwise 55	Sheriffs with 10 years of SLEP service: 62, otherwise 67
Final Rate Of Earnings	Highest consecutive 48 months in the last 10 years	Highest consecutive 96 months in the last 10 years; pensionable earnings currently capped at \$112,408.42 for 2017 increasing annually by 3% or ½ of CPI, whichever is less	Highest consecutive 48 months in the last 10 years	Highest consecutive 96 months in the last 10 years; pensionable earnings currently capped at \$112,408.42 for 2017 increasing annually by 3% or ½ of CPI, whichever is less	Annual salary on the last day of ECO participation	Highest consecutive 48 months in the last 10 years for each elected position	Highest consecutive 96 months in the last 10 years; pensionable earnings currently capped at \$112,408.42 for 2017 increasing annually by 3% or ½ of CPI, whichever is less
Survivor Benefits	Annuity for eligible spouse	Annuity for eligible spouse	Annuity for eligible spouse	Annuity for eligible spouse	Annuity for eligible spouse and unmarried children under 18	Annuity for eligible spouse and unmarried children under 18	Annuity for eligible spouse and unmarried children under 18
Post-Retirement Increase	3% of original amount	3% or 1/2 of CPI, whichever is less of original amount	3% of original amount	3% or 1/2 of CPI, whichever is less of original amount	3% of original amount	3% of original amount	3% or 1/2 of CPI, whichever is less of original amount
Early Retirement	At age 55, discount based on age and service	At age 62, dis- count based on age and service	None	At age 50, discount based on age and service	None	None	At age 62, discount based on age and service

### **FINANCIAL**

### Refunds

Members who are ineligible for a retirement annuity of greater than 100 dollars per month and terminate their IMRF participation may withdraw their contributions and forfeit future retirement benefits.

### Early Retirement

IMRF employers may offer an Early Retirement Incentive (ERI) for active members who have 20 or more years of service and are age 50 (57 for Tier 2 members) or older. The program is optional with employers and may not be offered until the liability for any previous ERI is paid. An employer may not adopt an ERI more frequently than once every five years after the close of a prior ERI.

### Supplemental Retirement Benefit

Retirees and surviving spouses who have been receiving benefits for at least one year receive a supplemental retirement benefit in July. The total supplemental benefit pool in each year is equal to 0.62% of the participating payroll for the previous year. An individual receives a *pro-rata* share of the total pool based upon the ratio of his or her individual benefits to the total benefits paid to all IMRF recipients.

### **Death Benefits**

An eligible spouse of a deceased retired member receives a one-time death benefit of \$3,000 plus a monthly pension equal to one-half (66-2/3% for ECO retirees and Tier 2 members) of the member's pension. The beneficiaries of a participating member who had at least one year of service receive a lump sum death benefit equal to one year's earnings (limited to the pensionable earnings cap for Tier 2 members) plus the member's contributions with interest. Death benefits paid upon the death of an inactive member vary depending on the member's age and service.

### Disability

Members who have at least one year of service and meet the disability medical requirements will receive a benefit of up to 50% of the average monthly earnings in the 12 months preceding disability. Disabled ECO members receive a disability benefit equal to the benefit they would receive upon retirement. IMRF reduces the benefit by Social Security or workers' compensation awards. Members paid disability continue to receive pension service credit and death benefit protection.

### B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### 1. REPORTING ENTITY

As defined by generally accepted accounting principles established by the Governmental Accounting Standards Board (GASB), the financial reporting entity consists of a primary government, as well as its component units, which are legally separate organizations for which the elected officials of the primary government are financially accountable. Financial accountability is defined as:

- (1) The primary government is financially accountable if it appoints a voting majority of the organization's governing body and (a) it is able to impose its will on that organization or (b) there is a potential for the organization to provide specific financial benefits to, or impose specific financial burdens on, the primary government.
- (2) The primary government is financially accountable if an organization is fiscally dependent on and there is a potential for the organization to provide specific financial benefits to, or impose specific financial burdens on, the primary government.

Based upon these criteria, IMRF has no component units and IMRF is not a component unit of any other entity.

### 2. BASIS OF ACCOUNTING

IMRF prepares its financial statements using the accrual basis of accounting. It recognizes member and employer contributions as revenues in the month member earnings are payable in accordance with the provisions of the Illinois Pension Code. Benefits and refunds are recognized as expenses when payable. Expenses are recorded when the corresponding liabilities are incurred regardless of when payment is made.



### 3. USE OF ESTIMATES

The preparation of IMRF's financial statements in conformity with U.S. generally accepted accounting principles requires management to make significant estimates and assumptions that affect the reported amounts and fiduciary net position at the date of the financial statements. Actual results could differ from those estimates.

### 4. RISKS AND UNCERTAINTIES

IMRF invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market, and credit risk. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the value of investment securities will occur in the near term, and such changes could materially affect the amounts reported in the Statements of Fiduciary Net Position.

### 5. INCOME TAXES

IMRF is exempt from federal and state income taxes and has received a favorable determination from the Internal Revenue Service under Code section 401(a).

### 6. METHOD USED TO VALUE INVESTMENTS

IMRF reports investments at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value for stocks is determined by using the closing price listed on the national securities exchanges as of December 31. Fair value for fixed income securities is determined principally by using quoted market prices provided by independent pricing services. For commingled funds, the net asset value is determined and certified by the commingled fund manager as of December 31. Alternative investments, which include real estate, private equity and absolute return funds, are valued based on amounts established by fund managers, which are subject to annual audit. Fair values for directly owned real estate investments are determined by appraisals. Fair value for the majority of derivative instruments is determined principally by using quoted market prices provided by independent pricing services. Remaining derivative instruments are priced by The Northern Trust Company by obtaining prices from a variety of internal and external sources.

### 7. DEFERRED INFLOWS/OUTFLOWS OF RESOURCES

The Statements of Fiduciary Net Position, in addition to assets, will on occasion report a separate section for the deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period(s) and as such, will not be recognized as an outflow of resources (expense) until then. In addition to liabilities, the Statements of Fiduciary Net Position will on occasion report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period(s) and as such, will not be recognized as an inflow of resources (revenue) until that time. IMRF has not reported either item for 2017 or 2016.

### C. NEW ACCOUNTING PRONOUNCEMENTS

In June 2015, GASB issued Statement No. 74, "Financial Reporting for Post-employment Benefit Plans Other Than Pension Plans." The objective of this Statement is to improve the usefulness of information about post-employment benefits other than pensions (other post-employment benefits or OPEB) included in the general purpose external financial reports of state and local governmental OPEB plans for making decisions and assessing accountability. IMRF, as a plan, does not provide Post-employment Benefits other than pensions to its annuitants; therefore there is no impact on these financial statements.

In June 2015, GASB issued Statement No. 75, "Accounting and Financial Reporting for Post-employment Benefits Other Than Pension Plans." The primary objective of this Statement is to improve accounting and financial reporting by state and local governments for post-employment benefits other than pensions (other post-employment benefits or OPEB). It also improves information provided by state and local governmental employers about financial support for OPEB that is provided by other entities. IMRF will adopt GASB Statement No. 75 for its December 31, 2018 financial statements.

### **FINANCIAL**

In January 2017, GASB issued Statement No. 84, "Fiduciary Activities." The objective of this Statement is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported by primary governments. IMRF is not a primary government that reports component units, therefore there is no impact on its financial statements.

In March 2017, GASB issued Statement No. 85, "Omnibus 2017." The objective of this Statement is to address practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits [OPEB]). Where applicable, IMRF will adopt GASB Statement No. 85 for its December 31, 2018 financial statements.

In May 2017, GASB issued Statement No. 86, "Certain Debt Extinguishment Issues." The objective of this Statement is to improve consistency in accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources (resources other than the proceeds of refunding debt) are placed in an irrevocable trust for the sole purpose of extinguishing debt. IMRF does not fall within the scope of Statement No. 86; therefore there is no impact on its financial statements.

In June 2017, GASB issued Statement No. 87, "Leases." The objective of this Statement is to improve accounting and financial reporting for leases by governments. This statement requires recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underling asset. IMRF will adopt Statement No. 87 for its December 31, 2019 financial statements.

In March 2018, GASB issued Statement No. 88, "Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements." The objective of this Statement is to improve information that is disclosed in the notes to financial statements related to debt, including direct borrowings and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt. IMRF does not carry any debt and therefore does not fall within the scope of Statement No. 88. There is no impact on its financial statements.

### D. DEPOSITS AND INVESTMENT RISK DISCLOSURES

### 1. DEPOSITS

Custodial credit risk for deposits is the risk that, in the event of a financial institution failure, IMRF'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 Municipal Retirement Fund. Cash held in the investment-related bank account is neither insured nor collateralized for amounts in excess of \$250,000. These deposits are not required to be collateralized by statute and there is no related deposit policy for custodial risk. Cash is swept daily into an investment account. Withdrawals are made daily to fund necessary business expenses. The timing of the withdrawals may create a negative cash balance. This is due to the payment on the last business day in December of each year, the following year's January 1st benefit payments. These payments are recorded as a prepaid as of December 31st in the financial statements.

These assets are under the custody of the Northern Trust Company. The Northern Trust Company has an AA Long Term Deposit/Debt rating by Standard & Poor and an Aa2 rating by Moody.

	2017	2016
Carrying amounts at December 31		
Cash and cash equivalents	\$ 1,542,479	\$ 738,052
Bank balances at December 31		
Bank balances	\$ 244,302	\$ 242,735
Amount exposed to custodial credit risk		
Cash balance held with investment manager exposed to custodial credit risk	\$ 909,114	\$ 1,017,799



### 2. INVESTMENT POLICIES, ASSET ALLOCATION, AND MONEY-WEIGHTED RATE OF RETURN

The Illinois Pension Code prescribes the "Prudent Man Rule" as IMRF's investment authority, effective August 25, 1982. This rule requires IMRF to make investments with the care, skill, prudence, and diligence, under the circumstances then prevailing, that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an entity of like character with like aims. Within the "prudent man" framework, the Board of Trustees adopts investment guidelines for IMRF Investment Managers, which are included within their respective Investment Management Agreements.

The "Investments" Section contains a summary of these guidelines. By statute all investments are held in the name of the Illinois Municipal Retirement Fund or in the name of a nominee created for the express purpose of securities registration.

IMRF's policy in regard to the allocation of invested assets is established and may be amended by the Board. It is the policy of the Board to pursue an investment strategy that reduces risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes. The following was the Board's adopted asset allocation as of December 31, 2017:

Asset Class	Target
U.S. equities	37%
Foreign equities	18
Fixed income	28
Alternative	9
Real estate	7
Short-term	1

For the year ended December 31, 2017, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 15.96 percent. For the year ended December 31, 2016 it was 7.84 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

### 3. INVESTMENT SUMMARY

The following table presents a summary of the Fund's investments by type at December 31, 2017 and 2016:

	2017	2016
U.S. government & agency fixed income	\$ 3,097,234,458	\$ 3,214,724,905
U.S. corporate fixed income	2,984,621,123	2,811,204,924
U.S. fixed income funds	3,320,265,684	2,948,622,934
Foreign fixed income securities	819,506,083	723,370,529
Foreign fixed income funds	584,997,304	307,903,523
U.S. equities	11,891,805,326	10,607,507,564
U.S. equity funds	5,716,887,875	5,183,971,189
Foreign equities	5,158,350,138	3,781,377,558
Foreign equity funds	3,121,476,511	2,651,235,407
Foreign currency forward contracts	(1,093,774)	2,874,177
Pooled short-term investment funds	649,548,581	709,591,460
Real estate	2,550,292,616	2,275,758,558
Private equity	1,312,453,792	1,114,652,224
Absolute return funds	2,937,784	23,183,100
Swaps	(502,363)	2,915,515
Options	803,892	(552,414)
Other	5,215,242	5,954,727
Total investments at fair value	\$ 41,214,800,272	\$ 36,364,295,880

### **FINANCIAL**

Short-term securities include commercial paper or notes having a maturity of less than 90 days. Pooled short-term investment funds are commingled funds managed by Northern Trust. Under the terms of the investment agreement for these funds, Northern Trust may invest in a variety of short-term investment securities. Real estate investments include commingled funds, directly owned, timberland, and farmland funds. Alternative investments include commingled funds and separate accounts that invest in private equity and absolute return funds.

There are no individual investments held by IMRF that represent 5% or more of the Fund's fiduciary net position or the investment portfolio at year-end. As of December 31, the following lists IMRF's holdings in index funds.

	2017	2016
MFB NT Collective Aggregate Bond Index Fund	\$ 1,662,481,630	\$ 1,508,847,244
BlackRock US Debt Index Fund	1,592,890,233	1,393,601,514
NT Collective U.S. Marketcap Equity Index Fund	3,570,280,886	2,944,696,020
NT Collective EAFE Index Fund	2,271,467,040	1,982,765,302

### 4. 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, IMRF will not be able to recover the value of investments or collateral securities that are in the possession of an outside party. As of December 31, the following investments were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent, but not in the Fund's name:

	2017	2016
Investments in foreign currency	\$ 3,709,517	\$ 9,228,814

### 5. CONCENTRATION OF CREDIT RISK DEBT SECURITIES

The debt security portfolios are 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 total debt securities portfolio is managed using the following general guidelines adopted by the IMRF Board of Trustees:

- A. Bonds, notes, or other obligations of indebtedness issued or guaranteed by the U.S. government, its agencies, or instrumentalities are permissible investments and may be held without restriction.
- B. The average credit quality of the total portfolio must be investment grade.
- C. Debt obligations of any single U.S. corporation shall generally be limited to a maximum of 5% of the total portfolio at market value.
- D. Generally, no more than 30% of a manager's assets at market value may be invested in securities rated below investment grade at the time of purchase. Investment managers using high yield disciplines will not be subject to this restriction.



- E. Debt obligations of any U.S. industry shall generally be limited to a maximum of 25% of the total portfolio at market value.
- F. Bonds or other debt obligations of foreign countries and corporations payable in U.S. and in non-U.S. funds are authorized but, in general, will not exceed 15% of the portfolio.

### **Quality Rating**

	2017	2016	
Corporate and International			
AAA	\$ 265,421,436	\$ 219,384,059	
AA	271,926,626	280,880,549	
A	779,539,880	589,913,018	
BBB	1,187,602,569	1,251,885,555	
ВВ	665,681,057	603,274,996	
В	307,500,450	341,125,979	
CCC	51,490,827	73,845,644	
CC	1,730,857	2,264,383	
C	959,802	186	
D	2,528,903	9,139,499	
Not Rated	72,062,441	60,363,592	
Government and Agencies			
Agencies	1,479,710,852	2,045,358,503	
AAA	473,095,545	673,646,088	
AA	1,323,580,511	573,885,282	
A	14,240,138	21,395,612	
BBB	3,745,957	2,399,204	
Not Rated	543,813	538,209	
Fixed Income Funds			
Index	3,905,262,988	3,256,526,457	
Total	\$ 10,806,624,652	\$ 10,005,826,815	

The "agencies" caption in the above table does not have a specific credit quality rating since they were not covered by the rating vendors. Typically these securities have at least an AA credit quality rating. The U.S. fixed income fund had an average credit quality rating of AA for 2017 and 2016. The international fixed income fund had an average quality rating of B for 2017 and 2016.



### 6. INTEREST RATE RISK

IMRF manages its exposure to fair value losses arising from interest rate risk by diversifying the debt securities portfolio and maintaining the debt securities portfolio at an effective duration range between 80% and 120% of the benchmark index.

Duration is a 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 full price. The effective duration measures the sensitivity of market price to parallel shifts in the yield curve. IMRF benchmarks its debt security portfolio to the Bloomberg Aggregate Bond Index. At December 31, 2017 and 2016, the effective duration of the Bloomberg Aggregate Bond Index was 5.98 and 5.82, respectively. At the same points in time, the effective duration of IMRF debt securities portfolio was 3.65 and 3.78, respectively.

Investment	2017 Fair Value	Effective Weighted Duration Rate	2016 Fair Value	Effective Weighted Duration Rate
U.S. Corporate	\$ 2,984,621,123	4.72	\$ 2,811,204,924	4.77
U.S. Government & Agencies	3,097,234,458	6.60	3,214,724,905	6.39
U.S. Fixed Income Funds	3,320,265,684	0.08	2,948,622,934	0.04
International	819,506,083	5.42	723,370,529	5.14
International Fixed Income Fund	584,997,304	0.36	307,903,523	0.33
Total	\$ 10,806,624,652	3.65	\$ 10,005,826,815	3.78



#### 7. FOREIGN CURRENCY RISK

The international portfolio is constructed on the principles of diversification, quality, growth, and value. Country exposure is limited to 25% or two times the benchmark weighting at fair value. Risk of loss arises from changes in currency exchange rates. International managers may also engage in transactions to hedge currency at their discretion. Currency trading may not be used for speculative purposes. The following represents IMRF's holdings by currency in international equity and fixed income holdings:

	2017	2016
Foreign Equities		
Australian dollar	\$ 110,746,230	\$ 85,212,504
Brazilian real	102,150,530	82,858,540
British pound sterling	722,554,758	543,334,144
Canadian dollar	186,940,365	141,351,946
Chilean peso	10,647,987	11,153,159
Colombian peso	1,300,492	7,806,236
Croatian kuna	-	119,049
Czech koruna	9,671,720	6,590,763
Danish krone	81,653,207	26,743,028
Euro	1,331,136,125	1,000,633,943
Hong Kong dollar	354,114,068	194,299,371
Hungarian forint	9,410,977	4,083,522
Indian rupee	115,739,734	78,407,521
Indonesian rupiah	36,566,205	19,243,123
Japanese yen	865,678,535	655,829,983
Malaysian ringgit	8,933,418	6,882,886
Mexican peso	45,346,112	27,361,793
New Israeli shekel	11,483,819	7,482,784
New Taiwan dollar	95,840,111	71,651,768
New Zealand dollar	8,542,810	1,226,071
Norwegian krone	49,979,125	40,087,197
Philippine peso	2,493,024	3,448,081
Polish zloty	10,946,860	4,609,791
Qatari riyal	1,796,131	2,709,632
Singapore dollar	55,343,799	44,008,308
South African rand	44,454,428	39,701,259
South Korean won	186,053,821	119,738,970
Swedish krona	109,393,348	116,495,648
Swiss franc	287,675,126	217,495,107
Thai baht	30,466,856	19,734,634
Turkish lira	38,013,021	23,060,826
United Arab Emirates dirham	3,645,446	4,364,621
United States dollar	2,533,589,301	2,824,886,757
Total Foreign Equities	\$ 7,462,307,489	\$ 6,432,612,965

#### **FINANCIAL**

	2017	2016
Foreign Fixed Income		
Argentine peso	\$ 8,222,883	\$ 5,546,548
Brazilian real	20,527,678	22,886,040
British pound sterling	1,539,493	-
Canadian dollar	1,965,355	-
Chilean peso	1,016,583	-
Colombian peso	8,931,295	1,641,520
Euro	-	8,485,519
Czech koruna	2,597,363	-
Hungarian forint	-	3,893,522
Indonesian rupiah	9,256,558	11,631,851
Japanese yen	4,709,108	-
Malaysian ringgit	9,778,794	4,532,311
Mexican peso	28,775,060	4,505,477
New Romanian leu	2,036,628	-
New Zealand dollar	15,819,056	22,214,673
Norwegian krone	8,435,991	-
Peruvian nuevo sol	3,032,261	2,554,552
Polish zloty	7,392,753	8,104,609
Russian ruble	19,512,304	16,617,825
South African rand	14,954,378	2,686,057
Thai baht	2,139,354	3,134,384
Turkish lira	8,694,797	7,907,855
United States dollar	1,224,460,947	904,931,309
Uruguayan peso	704,748	-
<b>Total Foreign Fixed Income</b>	1,404,503,387	1,031,274,052
Total	\$ 8,866,810,876	\$ 7,463,887,017

#### E. SECURITIES LENDING PROGRAM

The IMRF securities lending program is authorized by the IMRF Board of Trustees. IMRF lends securities (both equity and fixed income) to securities firms on a temporary basis through its agent, The Northern Trust. There are no restrictions on the amount of securities that may be lent. IMRF receives fees for all loans and retains the right to all interest and dividend payments while the securities are on loan. All securities are loaned versus collateral that may include cash, U.S. government securities and irrevocable letters of credit. U.S. securities are loaned versus collateral valued, subject to de-minimus rules, at 102% of the fair value of the securities plus any accrued interest (105% for non-U.S. securities). As the fair value of the securities loaned changes, the borrower must adjust the collateral accordingly. IMRF or the borrower has the right to close the loan at any time. The average term of overall loans was 88 days as of December 31, 2017, and 68 days as of December 31, 2016. When the loan closes, the borrower returns the securities loaned to IMRF, and IMRF returns the associated collateral to the borrower. IMRF cannot pledge or sell the non-cash collateral unless the borrower fails to return the securities borrowed.



The Northern Trust pools all collateral received from securities lending transactions and invests any cash collateral. IMRF holds a prorated share of the collateral provided by the borrowers of its securities. The cash collateral is shown on IMRF's financial statements. Cash collateral is invested in a short-term investment pool, which had an interest sensitivity of 27 days as of December 31, 2017, and 28 days as of December 31, 2016. Cash collateral may also be invested separately in "term loans," in which case the investments match the term of the loan. These loans can be terminated on demand by either lender or borrower.

Indemnification pertains to the situation in which a client's securities are not returned due to the insolvency of a borrower and The Northern Trust has failed to live up to its contractual responsibilities relating to the lending of those securities. The Northern Trust's responsibilities include performing appropriate borrower and collateral investment credit analyses, demanding adequate types and levels of collateral and complying with applicable Department of Labor and Federal Financial Institutions Examination Council regulations concerning securities lending. During 2017 and 2016, there were no violations of legal or contractual provisions and no borrower or lending agent default losses to the securities lending agent. There are no dividends or coupon payments owing on the securities lent. IMRF had no credit risk as a result of its securities lending program as the collateral held exceeded the fair value of the securities lent.

Securities lent are included in the Statements of Fiduciary Net Position. The fair value of collateral received includes cash collateral of \$350,734,959 and \$361,207,072 at December 31, 2017 and 2016, respectively.

Loans outstanding as of	December 31, 2017	December 31, 2016	
Market value of securities loaned	\$ 1,433,990,390	\$ 1,015,932,470	
Market value of collateral received	\$ 1,472,575,860	\$ 1,043,593,684	

#### F. DERIVATIVES

IMRF's investment managers may enter into derivative transactions as permitted by their guidelines. A derivative financial instrument is an investment whose payoff depends upon the value of an underlying asset such as bond or stock prices, a market index, or commodity prices. Derivative financial instruments 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. IMRF's investment managers seek to control this risk through counterparty credit evaluations and approvals, counterparty credit limits, and exposure monitoring procedures. Market risk is the possibility that a change in interest or currency rates 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. Senior investment management approves these limits and the risk positions of the investment managers are reviewed on a periodic basis to monitor compliance with the limits. IMRF does not purchase derivatives with borrowed funds.

During the year, IMRF's derivative investments included foreign currency forward contracts, financial futures, options, and swaps. Foreign currency forward contracts are used to hedge against the currency risk in IMRF's foreign stock and fixed income security portfolios. The remaining derivative financial instruments are used to improve yield, adjust the duration of the fixed income portfolio, or to hedge changes in interest rates.

#### **FINANCIAL**

Foreign currency forward contracts are agreements to buy or sell a specific amount of a specific currency at a specified delivery or maturity date for an agreed upon price. As the fair value of the underlying currency varies from the original contract price, IMRF records an unrealized gain or loss. The counterparties to the foreign currency forward contracts are banks which are rated A or above by rating agencies. The fair value of forward currency contracts outstanding at December 31, 2017 and 2016 is as follows:

Fair Value as of	December 31, 2017	December 31, 2016
Pending Foreign Exchange Purchases		
Australian dollar	\$ 1,327,427	\$ 17,341,852
Brazilian real	11,508,271	1,881
British pound sterling	25,726,041	20,526,790
Canadian dollar	37,444,036	13,444,824
Chilean peso	3,622,588	951,111
Colombian peso	1,903,876	2,929,104
Czech koruna	8,736,751	-
Danish krone	7,918,197	12,781,940
Euro	87,496,172	35,404,909
Hong Kong dollar	4,957,837	687,223
Hungarian forint	4,951,435	884,952
Indian rupee	1,981,503	1,865,119
Indonesian rupiah	12,635,740	10,972,317
Japanese yen	14,757,667	9,305,933
Malaysian ringgit	-	3,620,688
Mexican peso	3,355,751	12,730,338
New Israeli shekel	2,090,797	1,302,289
New Romanian leu	2,107,816	2,684,922
New Taiwan dollar	-	1,865,251
New Zealand dollar	3,179,122	22,470,166
Norwegian krone	950,751	-
Peruvian nuevo sol	496,121	1,944,590
Polish zloty	4,126,967	4,177,129
Russian ruble	252,586	297,747
Singapore dollar	2,088,634	289,610
South African rand	-	2,550,313
Swedish krona	10,541,247	257,959
Swiss franc	4,957,352	7,970,403
Thai baht	2,672,964	3,552,317
Turkish lira	1,704,944	1,580,146
United States dollar	268,494,773	276,174,813
Total Purchases	\$ 531,987,366	\$ 470,566,636



Fair Value as of	December 31, 2017	December 31, 2016
Pending Foreign Exchange Sales		
Argentine peso	\$ (4,332,395)	\$ (3,371,706)
Australian dollar	(16,901,076)	(5,471,715)
Brazilian real	-	(1,572,752)
British pound sterling	(375,971)	(23,413,028)
Canadian dollar	(17,486,114)	(21,091,284)
Chilean peso	(2,059,454)	(850,196)
Chinese yuan renminbi	(3,895,567)	(17,661,790)
Colombian peso	(748,003)	-
Danish krone	(5,056,872)	-
Euro	(61,013,725)	(69,816,138)
Hong Kong dollar	(9,039,559)	(3,957,306)
Hungarian forint	-	(2,809,392)
Indian rupee	-	(3,672,251)
Indonesian rupiah	-	(3,135,280)
Japanese yen	(65,331,812)	(49,503,819)
Malaysian ringgit	(1,725,088)	-
Mexican peso	(7,603,360)	(9,275,084)
New Israeli shekel	(1,248,918)	(3,718,265)
New Romanian leu	(4,133,376)	(1,765,173)
New Taiwan dollar	(4,273,789)	(5,544,008)
New Zealand dollar	(3,131,465)	(842,342)
Norwegian krone	(6,326,667)	(3,511,657)
Peruvian nuevo sol	(292,742)	-
Philippine peso	(10,037,988)	(3,660,645)
Polish zloty	(2,126,798)	(898,179)
Russian ruble	(1,601,237)	-
Singapore dollar	(424,348)	(2,183,284)
South African rand	(8,174,610)	-
South Korean won	(3,186,077)	(3,640,678)
Swedish krona	(17,375,132)	(23,292,342)
Swiss franc	(17,417,407)	-
Thai baht	-	(3,035,677)
Turkish lira	-	(690,782)
United States dollar	(257,761,590)	(199,307,686)
Total Sales	(533,081,140)	(467,692,459)
Net Unrealized (Loss)/Gain	\$ (1,093,774)	\$ 2,874,177

#### **FINANCIAL**

Financial futures are similar to forward contracts, except futures contracts are standardized and traded on organized exchanges. As the market value of the underlying hedging assets vary from the original contract price, a gain or loss is recognized and is settled through the clearinghouse. Financial futures represent an off-balance sheet obligation as there are no balance sheet assets or liabilities associated with those contracts. The contractual amounts of future contracts outstanding at December 31, 2017 and 2016 are as follows:

Fair Value as of	December 31, 2017		December 3	1, 2016	Change
	Amount	Number of Contracts	Amount	Number of Contracts	Amount
Fixed income derivative futures sold	\$ 117,201,942	542	\$ 109,580,058	661	\$ 7,621,884
Fixed income derivatives futures purchased	306,811,205	2,382	344,394,923	2,604	(37,583,718)
Fixed income futures sold	306,811,205	2,382	344,394,923	2,604	(37,583,718)
Fixed income futures purchased	117,201,942	542	109,580,058	661	7,621,884
				•	
Equity derivatives futures purchased	\$ 73,590,000	550	\$ 46,401,150	415	\$ 27,188,850
Equity derivatives offsets futures sold	73,590,000	-	46,401,150	-	27,188,850
				•	
Cash and cash equivalent derivatives futures sold	\$ 492,286,875	2,020	\$ 240,496,600	987	\$ 251,790,275
Cash and cash equivalent futures purchased	492,286,875	2,020	240,496,600	987	251,790,275

Contractual amounts, which represent the fair value of the underlying assets of the derivative contracts, are often used to express the volume of these positions. Such amounts do not reflect the extent to which positions may offset one another or the potential risk, which is generally a lesser amount.

Financial options are agreements that give one party the right, but not the obligation, to buy or sell a specific amount of an asset for a specified price, called the strike price, on or before a specified expiration date. As a writer of financial options, IMRF receives a premium at the outset of the agreement and bears the risk of an unfavorable change in the price of the assets underlying the option. Gains and losses on options are determined based on fair values and are recorded in the Statements of Changes in Fiduciary Net Position. The fair value (liability) of financial options outstanding at year-end December 31, 2017 and 2016 are as follows:

Fair Value as of	December 31, 2017		Decembe	Change	
	Amount Notional Value		Amount	Amount Notional Value	
Financial put options	\$ 646,004	\$ 2,191	\$ (435,448)	\$ 132,010,050	\$ (132,007,859)
Financial call options	157,888	1,672	(116,966)	76,920,991	(76,919,319)

Interest rate swaps are agreements between two or more parties to exchange sets of cash flows over a period of time. In the most common type of interest rate swap arrangement, one party agrees to pay fixed interest payments on designated dates to a counterparty who, in turn, agrees to make return interest payments that float with some reference rate. In addition to interest rate swaps, one of IMRF's investment managers utilizes credit default swaps which add liquidity to individual credits and protect specific positions. Gains and losses on swaps are determined based on fair values and are recorded in the Statements of Changes in Fiduciary Net Position. The fair value (liability) of swaps outstanding at December 31, 2017 and 2016 are as follows:



Fair Value as of December 31, 2017		December 31, 2016	Change	
Swaps, gain/(loss)	\$(502,363)	\$2,915,515	\$(3,417,878)	

	As of Decemb	Change in Fair Value		
Type of Swap	Notional Value	Fair Value	Counterparty Credit Rating	Amount
Credit Default Swap	\$ 1,664,000	\$ 27,919	А	\$ 11,786
Credit Default Swap	1,664,000	-	А	54,667
Credit Default Swap	-	-	BBB	(1,139)
Credit Default Swap	-	-	BBB	-
Credit Default Swap	60,360,000	908,700	NR*	908,700
Credit Default Swap	60,360,000	(1,722,115)	NR*	(1,433,122)
Inflation Swap	-	-	А	(18,905)
Inflation Swap	-	-	А	35,865
Interest Rate Swap	113,694,700	615,618	А	(1,822,092)
Interest Rate Swap	113,694,700	(332,485)	А	580,921
Interest Rate Swap	-	-	NR*	(1,734,559)
Interest Rate Swap	-	-	NR*	-
Total	\$ 351,437,400	\$ (502,363)		\$ (3,417,878)

As of December 31, 2016							
Type of Swap	Notional Value	Fair Value	Counterparty Credit Rating				
Credit Default Swap	\$ 4,603,297	\$ 16,133	А				
Credit Default Swap	4,603,297	(54,667)	Α				
Credit Default Swap	3,334,683	1,139	BBB				
Credit Default Swap	3,334,683	-	BBB				
Credit Default Swap	4,560,000	-	NR*				
Credit Default Swap	4,560,000	(288,993)	NR*				
Inflation Swap	9,620,000	18,905	А				
Inflation Swap	9,620,000	(35,865)	А				
Interest Rate Swap	270,592,000	2,437,710	А				
Interest Rate Swap	270,592,000	(913,406)	А				
Interest Rate Swap	35,840,000	1,734,559	NR*				
Interest Rate Swap	35,840,000	-	NR*				
Total	\$ 657,099,960	\$ 2,915,515					

 $NR* = Not \ rated.$ 

#### **FINANCIAL**

#### G. FUTURE INVESTMENT COMMITMENTS

At December 31, 2017 and 2016, IMRF had future commitments for additional contributions to real estate and alternative investment managers totaling \$2,277,575,842 and \$1,774,752,899, respectively. This includes future commitments to directly owned real estate managers totaling \$188,856,175 and \$94,056,174 as of December 31, 2017 and 2016, respectively.

#### H. POST-EMPLOYMENT BENEFITS OTHER THAN PENSIONS

#### 1. PLAN DESCRIPTION

IMRF, as an employer, administers a single-employer defined benefit healthcare plan ("Retiree Health Plan") under the provisions of ILCS Chapter 215, Article 5, Section 367j. As required by the statutes, the Retiree Health Plan provides lifetime health and dental care insurance for eligible retirees and their spouses through IMRF's group health insurance plan, which covers both active and retired members. Currently 17 retirees are in the plan and 190 active employees could be eligible at retirement. Benefit subsidy provisions have been established by IMRF's Board of Trustees that cover a percentage of the retiree's insurance premiums from the date of retirement to the date the retiree becomes eligible for Medicare. The amount of the subsidy varies based upon the retiree's years of service with IMRF. These benefit subsidy provisions can be modified or terminated at the sole discretion of the IMRF Board. Except for any eligible subsidy, retirees must pay the entire blended insurance premium for their coverage.

#### 2. FUNDING POLICY

The contribution requirements of plan members and IMRF are established by IMRF's Board of Trustees within the provisions of the Illinois statutes. The required contribution is based on projected pay-as-you-go financing requirements. For 2017 and 2016, IMRF contributed \$2,319,492 and \$2,293,831, respectively, to the plan for current premiums, including a \$39,392 subsidy in 2017 and a \$41,194 subsidy in 2016 for retiree health and dental care premiums (80.4% and 79.6% of total premiums for each year). Plan members receiving benefits contributed \$564,885 in 2017 and \$589,136 in 2016, or 19.6% and 20.4% of the total premiums for each year, through their required contributions of between \$110 and \$362 per month based upon their coverage.

#### 3. ANNUAL OPEB COST AND NET OPEB OBLIGATION

IMRF's annual other post-employment benefit (OPEB) expense is calculated based on the annual required contribution of the employer (ARC), an amount actuarially determined in accordance with the parameters of GASB Statement 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities over a period not to exceed thirty years. The following table shows the components of IMRF's annual OPEB cost, the amount actually contributed to the plan, and changes in IMRF's net OPEB obligation to the Retiree Health Plan:

	2017	2016	2015
Annual required contribution	\$ 166,819	\$ 177,296	\$ 166,811
Interest on net OPEB obligation	79,713	73,415	68,265
Adjustment to annual required contribution	(56,980)	(52,478)	(48,796)
Annual OPEB expense	189,552	198,233	186,280
Contributions made	(103,370)	(114,258)	(117,607)
Increase in net OPEB obligation	86,182	83,975	68,673
Net OPEB obligation - beginning of year	1,062,845	978,870	910,197
Net OPEB obligation - end of year	\$ 1,149,027	\$ 1,062,845	\$ 978,870

In 2017, 2016 and 2015, IMRF contributed 62%, 64% and 71%, respectively, of the annual required OPEB contribution to the plan.



#### 4. ACTUARIAL VALUATION INFORMATION

Actuarial Valuation December 31	Actuarial Accrued Liability (AAL)	Actuarial Assets	Actuarial Assets as a Percentage of AAL	Total Unfunded Actuarial Accrued Liability (UAAL) (a)	Actuarial Covered Payroll (b)	UAAL as a Percentage of Covered Payroll (a/b)
2017	\$1,737,666	\$-	-%	\$1,737,666	\$16,018,109	10.8%
2016	1,772,578	-	-	1,772,578	15,028,706	11.8
2015	1,861,671	-	-	1,861,671	14,532,459	12.8

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The Retiree Health Plan was established as a pay-as-you-go plan and IMRF does not intend to pre-fund at this time.

#### 5. ACTUARIAL METHODS AND ASSUMPTIONS

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan member to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities consistent with the long-term perspective of the calculations.

In the December 31, 2017 actuarial valuation, the individual entry age actuarial cost method was used. The actuarial assumptions included a 7.5% investment rate of return which is based upon the employer's assumed return on its assets and an annual healthcare cost trend rate of 9% initially, reduced by decrements to an ultimate rate of 3.25% after nine years. Both rates include a 2.5% inflation assumption. The unfunded actuarial accrued liability is being amortized as a level percentage of projected payroll over an open 30 year period.

#### I. FAIR VALUE MEASUREMENT

IMRF categorizes investments measured at fair value within the fair value hierarchy established by generally accepted accounting principles (GAAP). The hierarchy prioritizes valuation inputs used to measure the fair value of the asset or liability into three broad categories.

The inputs or methodology used for valuing the securities is not an indication of the risk associated with investing in those respective securities.

The three hierarchy categories are as follows:

- Level 1: Investments reflect prices quoted in active markets for identical assets.
- Level 2: Investments reflect prices that are based on a similar observable asset either directly or indirectly in an active market, and inputs in markets are not considered to be active for identical or similar assets.
- Level 3: Investments reflect prices based on unobservable inputs may include situations where there is minimal, if any, market activity for the investment.

If the fair value is measured using inputs from different levels in the fair value hierarchy, the measurement is categorized based on the lowest priority level input that is significant to the valuation. The Fund's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgement and considers factors specific to the investment. Investments measured at fair value using the net asset value (NAV) per share (or equivalent) as a practical expedient to fair value are not classified in the fair value hierarchy; however, separate disclosures for these investments are included in this report.

#### **FINANCIAL**

Securities lending cash collateral and short term investments consisting of money market funds, certificates of deposit, and highly liquid cash equivalents are reported at amortized cost which approximates fair value. These investments are not categorized in the fair value hierarchy.

Fixed income and equity investments classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets, to the extent that these securities are actively traded.

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

Fixed income and equity investments classified in Level 3 of the fair value hierarchy are valued using significant unobservable inputs, proprietary information, inputs that cannot be corroborated by observable market data and/or due to limited trading volume.

The following tables summarize the valuation of IMRF's investments by the fair value hierarchy levels and investments measured at NAV as of December 31, 2017 and 2016.

	As of December 31, 2017				
	Fair Value Measurements Using				
	Fair Value	Level 1 Inputs	Level 2 Inputs	Level 3 Inputs	Investments Measured at NAV
U.S. government & agency fixed income	\$ 3,097,234,458	\$ 1,240,960,610	\$ 1,807,483,383	\$ 48,790,465	\$ -
U.S. corporate fixed income	2,984,621,123	-	2,929,802,802	54,818,321	-
U.S. fixed income funds	3,320,265,684	-	1,662,481,630	_	1,657,784,054
Foreign fixed income funds	1,404,503,387	-	789,980,616	29,525,467	584,997,304
Fixed Income Total	10,806,624,652	1,240,960,610	7,189,748,431	133,134,253	2,242,781,358
U.S. equities	11,891,805,326	11,891,451,276	26,939	327,111	-
U.S. equity funds	6,534,407,035	2,806,167	3,570,280,886	-	2,961,319,982
Foreign equities	5,158,350,138	5,157,024,557	1,178,052	147,529	-
Foreign equity funds	2,303,957,351	32,490,311	2,271,467,040	-	-
Equity Total	25,888,519,850	17,083,772,311	5,842,952,917	474,640	2,961,319,982
Real Estate Total	2,550,292,616	-	-	659,018,846	1,891,273,770
Private Equity Total	1,312,453,792	-	-	-	1,312,453,792
Absolute Return Funds Total	2,937,784	-	-	-	2,937,784
Options Total	803,892	803,892	-		<u>-</u>
Swaps Total	(502,363)	-	(502,363)		<u>-</u>
Investments measured at fair value	\$ 40,561,130,223	\$ 18,325,536,813	\$ 13,032,198,985	\$ 792,627,739	\$ 8,410,766,686
Investments measured at amortized cost	653,670,049				
Total	\$ 41,214,800,272				



	As of December 31, 2016				
	Fair Value Measurements Using				
	Fair Value	Level 1 Inputs	Level 2 Inputs	Level 3 Inputs	Investments Measured at NAV
U.S. government & agency fixed income	\$ 3,214,724,905	\$ 1,319,964,076	\$ 1,820,995,083	\$ 73,765,746	\$ -
U.S. corporate fixed income	2,811,204,924	-	2,726,669,177	84,535,747	-
U.S. fixed income funds	2,948,622,934	-	1,508,847,244	-	1,439,775,690
Foreign fixed income funds	1,031,274,052	-	708,342,363	15,028,166	307,903,523
Fixed Income Total	10,005,826,815	1,319,964,076	6,764,853,867	173,329,659	1,747,679,213
U.S. equities	10,607,507,564	10,607,180,441	-	327,123	-
U.S. equity funds	5,183,971,189	3,338,558	2,944,696,020	-	2,235,936,611
Foreign equities	3,781,377,558	3,768,256,498	12,975,209	145,851	-
Foreign equity funds	2,651,235,407	59,787,640	1,982,765,302	-	608,682,465
<b>Equity Total</b>	22,224,091,718	14,438,563,137	4,940,436,531	472,974	2,844,619,076
Real Estate Total	2,275,758,558	-	-	643,973,375	1,631,785,183
<b>Private Equity Total</b>	1,114,652,224	-	-	-	1,114,652,224
Absolute Return Funds Total	23,183,100	-	-	-	23,183,100
Options Total	(552,414)	(262,806)	(289,608)	-	-
Swaps Total	2,915,515		2,915,515	-	-
Investments measured at fair value	\$ 35,645,875,516	\$ 15,758,264,407	\$ 11,707,916,305	\$ 817,776,008	\$ 7,361,918,796
Investments measured at amortized cost	718,420,364				
Total	\$ 36,364,295,880				

	Investments measured at Net Asset Value (NAV)					
Year Ended December 31, 2017	Fair Value	Unfunded Commitments	Redemption Frequency (if currently eligible)	Redemption Notice Period		
U.S. fixed income funds	\$ 1,657,784,054	\$ -	Daily	0-2 Days		
Foreign fixed income	584,997,304	-	Daily	30 Days		
Commingled Fixed Income Funds Total	2,242,781,358	-				
U.S. equity funds	2,961,319,982	-	Daily	0-15 Days		
Foreign equity funds	-	-	-	-		
Commingled Equity Funds Total	2,961,319,982	-				
Real estate	1,891,273,770	1,240,706,466	Quarterly, Not Eligible	60 days, N/A		
Private equity	1,312,453,792	848,013,201	Quarterly, Not Eligible	N/A		
Absolute return funds	2,937,784	-	Monthly, Quarterly	Notice in Place		
Investments measured at NAV	\$8,410,766,686	\$2,088,719,667		-		

	Investments measured at Net Asset Value (NAV)				
Year Ended December 31, 2016	Fair Value	Unfunded Commitments	Redemption Frequency (if currently eligible)	Redemption Notice Period	
U.S. fixed income funds	\$ 1,439,775,690	\$ -	Daily	0-2 Days	
Foreign fixed income	307,903,523	-	Daily	30 Days	
Commingled Fixed Income Funds Total	1,747,679,213	-			
U.S. equity funds	2,235,936,611	-	Daily	0-15 Days	
Foreign equity funds	608,682,465	-	Daily	0-1 Days	
Commingled Equity Funds Total	2,844,619,076	-			
Real estate	1,631,785,183	955,343,899	Quarterly, Not Eligible	60 days, N/A	
Private equity	1,114,652,224	725,352,826	Quarterly, Not Eligible	N/A	
Absolute return funds	23,183,100	-	Monthly, Quarterly	Notice in Place	
Investments measured at NAV	\$ 7,361,918,796	\$ 1,680,696,725			

#### 1. INVESTMENTS MEASURED AT NET ASSET VALUE

Commingled Fixed Income Funds. This type includes fixed income funds that are considered to be commingled in nature. The fair value of the investments in this type have been determined using the NAV per share (or equivalent) of the Fund's ownership interest in the partners' capital at the end of the period, based upon the fair value of the underlying investments.

**Commingled Equity Funds.** This type includes domestic equity funds and an international equity fund that are considered to be commingled in nature. The fair value of the investments in this type have been determined using the NAV per share (or equivalent) of the Fund's ownership interest in the partners' capital at the end of the period, based upon the fair value of the underlying investments.

**Real Estate Funds.** This type includes open-ended commingled funds, commingled close-ended funds and a commingled closed-ended fund of funds. The fair value of the investments in this type have been determined using the NAV per share (or equivalent) of the Fund's ownership interest in the partners' capital at the end of the period based upon the fair value of the underlying investments. The open-ended commingled funds are generally eligible for redemption on a quarterly basis. The closed-ended funds are not eligible for redemption. Distributions received as underlying investments within the fund are liquidated over the term of the fund, which is typically 7 to 12 years.

**Private Equity Funds.** This type consists of private equity separate accounts with underlying partnerships, private equity fund of funds, direct limited partnership investments, and a hedge fund of funds separate account with 25 underlying hedge fund investments. The fair value of the investments in this type have been determined using the NAV per share (or equivalent) of the Funds's ownership interest in the partners' capital at the end of the period based upon the fair value of the underlying investments. Private equity investments are not eligible for redemption. Distributions received as underlying investments within the fund are liquidated over the term of the partnership, which is typically 7 to 12 years. The hedge fund of funds is eligible for redemption at any time, subject to the redemption constraints of the underlying investments.

#### J. RESERVES

IMRF maintains several reserves as required by the Illinois Pension Code and Board policy. All reserves are fully funded with the exception of some individual employer retirement reserves. These reserves do not equal the present value of expected retirement benefits for all employers. In 2017 the present value of expected retirement benefits exceeded the retirement reserves for all employers combined by \$772,779,904. In 2016 the present value of expected retirement benefits exceeded the retirement reserves for all employers combined by \$4,843,812,603. These reserves are explained in the Illinois Pension Code, Section 7-202 through 208.



	2017	2016
Member Contribution Reserve		
Balance at December 31	\$ 6,924,855,255	\$ 6,716,725,619
Annuity Reserve		
Balance at December 31	\$ 22,007,921,864	\$ 21,085,519,077
Employer Reserves		
Retirement contribution reserve	\$ 12,438,546,093	\$ 8,623,070,997
Earnings and experience reserve	7,072,524	56,624,023
Supplemental retirement benefit	1,235,642	770,429
Pooled death benefit reserve	20,219,777	19,463,926
Pooled disability benefit reserve	13,314,324	12,723,728
Balance at December 31	\$ 12,480,388,360	\$ 8,712,653,103

#### K. OTHER NOTES

#### 1. PREPAID EXPENSES

	2017	2016
Prepaid administrative expenses	\$ 1,790,248	\$ 1,722,140
January 1 benefits charged to bank account in December	150,862,786	139,953,395
Balance at December 31	\$ 152,653,034	\$ 141,675,535

#### 2. CAPITAL ASSETS

Capital assets are recorded at their cost at the time of acquisition. Depreciation and amortization are computed using the straight-line method over the estimated useful life of the related asset. The estimated useful lives are 1) furniture: ten years; 2) equipment: five to ten years; 3) internally developed software: six years; and 4) automobiles: four years.

Year ended December 31	2017	2016					
Equipment, furniture, automobiles, and internally developed software							
Beginning balance in service	\$ 24,628,992	\$ 12,999,865					
Additions	660,218	11,789,138					
Deletions	-	(160,011)					
Ending balance in service	25,289,210	24,628,992					
Software under development	4,789,470	-					
Total ending balance	30,078,680	24,628,992					
Accumulated depreciation and amortization							
Beginning balance	12,808,873	10,151,464					
Additions	2,074,006	2,817,420					
Deletions	-	(160,011)					
Ending balance	14,882,879	12,808,873					
Capital assets, net	\$ 15,195,801	\$ 11,820,119					

#### 3. COMPENSATED ABSENCES

Annual vacation leave is earned by all employees. Upon termination, employees are eligible to receive compensation for their accrued annual leave balances. At December 31, 2017, a liability existed for accumulated annual leave calculated at the employee's December 31, 2017 pay rate in the amount of \$951,556. Employees who have been continuously employed by IMRF for at least five years prior to the date of their retirement, resignation or death will receive payment for their accumulated sick leave balance with such payment not to exceed the



sum of ninety days of the employee's annual compensation. For employees who have not been employed for five continuous years, an accrued liability is calculated assuming the likelihood that they will meet the five-year threshold in the future. At December 31, 2017, a liability existed for accumulated and accrued sick leave, calculated at the employee's December 31, 2017 pay rate in the amount of \$2,842,364. The total leave liability of \$4,187,018 and \$3,593,957 as of December 31, 2017, and 2016, respectively, is reflected on the Statements of Fiduciary Net Position in accrued expenses and benefits payable.

#### 4. LEASE AGREEMENTS

The Fund leases its headquarters facilities at the Drake Oak Brook Plaza under an agreement with the building's management. In 2015 the Fund entered into an agreement covering the period November 1, 2016, through October 31, 2023. The lease contained an abatement clause. The Fund will amortize the abated rent, operating expenses, and real estate taxes over the period covered by the agreement. Total rental expense for 2017 and 2016 was \$942,807 and \$912,621, respectively.

The Fund also leases office space in Springfield for its Regional Counseling Center. In 2016 the Fund entered into an agreement covering the period November 1, 2016 through March 31, 2024. The new agreement also increased the total square footage. Total rental expense for the Springfield office for 2017 and 2016 was \$54,721 and \$34,004, respectively.

The minimum commitments for the remainder of these leases are as follows:

2018	\$ 1,072,571
2019	1,103,802
2020	1,135,956
2021	1,169,060
2022	1,203,391
2023	1,041,375
2024	17,215

#### 5. RISK MANAGEMENT

IMRF carries commercial, business, fiduciary, privacy and network security, and automobile liability insurance coverage provided by private insurance carriers. These policies limit the risk of loss from torts; theft of, damage to, and destruction of assets; errors and omission; injuries to employees; security breaches and natural disasters. There have been no material insurance claims filed or paid during the last three years.

The Fund is also exposed to investment risk. This risk is limited by diversification of the portfolio, establishment and monitoring of investment policies, and guidelines and monitoring of investment performance. In addition, investment consultants and fiduciary counsel monitor the Fund's activities and advise the Board of Trustees.

#### 6. CONTINGENCIES

IMRF is a defendant in a number of lawsuits that, in management's opinion, will not have a material effect on the financial statements.



### **REQUIRED SUPPLEMENTARY INFORMATION\***

SCHEDULE OF MONEY-WEIGHTED RATE OF RETURNS

The Money-weighted Rate of Return is presented to provide information regarding IMRF's investment performance, net of pension plan investment expense, adjusted for the changing amounts actually invested.

	2017	2016	2015	2014	2013	2012
Annual Money-weighted Rate of Return, net of investment expenses	15.93%	7.84%	0.58%	6.08%	20.15%	13.81%

(Ten year trend not available)

#### SUPPLEMENTARY INFORMATION

Schedule of Administrative Expenses	2017	2016
Personnel services	\$ 20,610,490	\$ 20,229,624
Supplies	454,588	585,339
Professional services	2,339,177	2,355,374
Occupancy and utilities	2,008,606	2,011,936
Postage and delivery	1,110,321	1,013,368
Equipment service and rental	943,865	1,031,922
Expendable equipment	223,396	218,272
Miscellaneous	1,266,871	7,286,811
Depreciation	2,074,006	2,817,420
Total	\$ 31,031,320	\$ 37,550,066

Schedule of Payments for Professional Services	2017	2016
Modernization consulting	\$ 626,212	\$ 790,881
Actuary	698,757	709,964
Internal auditing	93,044	101,484
External auditor	326,683	226,464
Medical consultant	136,194	120,494
Public relations consultant	83,147	83,147
Information Technology consultants	161,344	65,438
Legislative lobbying consultant	72,100	70,800
Compensation and benefit consultants	63,206	52,027
Legal services	63,027	107,216
Other consulting	8,407	13,140
Hearing officer	7,056	9,915
Tax consultant	-	4,404
Total	\$ 2,339,177	\$ 2,355,374

Schedule of Investment Expenses	2017	206
Investment manager fees	\$ 114,168,794	\$ 110,822,480
Master trustee fees	280,000	280,000
Investment consultants	1,176,287	928,455
Investment legal fees	335,079	271,604
Tax preparation fees	89,020	89,844
Miscellaneous	81,264	128,989
Total	\$ 116,130,444	\$ 112,521,372

<sup>\*</sup> Unaudited; see accompanying Independent Auditor's Report

Opportunities. A global investment portfolio, a tenacious investment team, and a commitment to the future of Illinois shape IMRF's ability to provide opportunities for people across the state. Whether investing locally or globally, IMRF considers the long-term impact of all decisions, recognizing our responsibility in ensuring IMRF members have a successful and stable retirement. With an ongoing focus on investment excellence, the future looks bright for IMRF, its members, and its employers.

# OPPORTUNITIES



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February 20, 2018

The Board of Trustees
The Executive Director
Illinois Municipal Retirement Fund
2211 York Road, Suite 500
Oak Brook, IL 60523

Dear Trustees and Executive Director:

Callan is pleased to report the results of the Illinois Municipal Retirement Fund (IMRF) investment program for calendar year 2017.

Global stocks marched steadily upward throughout 2017. Investor confidence in continued global economic growth helped all major asset classes post positive returns for 2017. The U.S. equity market, as measured by the Russell 3000 Index, advanced 21.1%. International equity markets, as measured by the MSCI All Country World ex-U.S. Index, exceeded U.S. equities with a 27.8% return during 2017. Emerging market equities led all major asset classes for the year with the MSCI Emerging Markets Index returning 37.3%. Despite higher short-term yields, the Bloomberg Aggregate Index rose 3.5%.

The Illinois Municipal Retirement Fund reported assets of \$41.0 billion as of December 31, 2017. This represented an increase of approximately \$4.7 billion from December 31, 2016.

The Total Fund returned 15.7% net of fees in 2017, outperforming the Total Fund Benchmark by 1.4%. The Total Fund Benchmark is composed of the individual asset class benchmarks weighted in the same proportion as the target asset class allocations<sup>1</sup>. On a gross of fee basis, the Total Fund ranked in the 57<sup>th</sup> percentile of Callan's Large Public Fund Sponsor Database for the one-year period, and in the 27<sup>th</sup> and 14<sup>th</sup> percentile for the trailing five and ten year periods, respectively. The Fund's domestic (+19.6%) and international (+27.5%) equity allocations posted the highest absolute returns during 2017.

The domestic equity portfolio, with a current target allocation of 38%, returned 19.6% net of fees for the year ended December 31, 2017. This return trailed the Russell 3000 Index by 1.5%. IMRF's Domestic Equity portfolio, gross of fees, ranked at the 62<sup>nd</sup> percentile compared to other public fund domestic equity portfolios.

The IMRF international equity portfolio gained 27.5% net of fees over the one-year period outperforming the MSCI All-Country World ex-U.S. Index by 0.3%. The gross of fee return of 27.9% ranked in the 70<sup>th</sup> percentile compared to Public Fund International Equity peers. This asset class, which has a current target allocation of 16%, is broadly invested and includes a dedicated allocation to non-US small cap and emerging markets stocks.

In a modestly rising interest rate environment, the Fund's fixed income portfolio returned 4.7% net of fees, outperforming the Barclays Aggregate Bond Index by 1.1%. The gross of fee return of 4.8% ranked in the 37<sup>th</sup> percentile compared to peers. The fixed income portfolio has a current target allocation of 29% and was well diversified including dedicated investments in non-core fixed income strategies.

As of December 31, 2017, the Total Fund Benchmark consisted of 38% Russell 3000 Index, 29% Bloomberg Aggregate Bond Index, 16% MSCI AC World ex-U.S. Index, 8% NFI-ODCE Value Weight Net, 8% of the Alternatives Custom Benchmark of 9%, and 1% of the Citigroup 90-Day T-Bill Index.



Illinois Municipal Retirement Fund February 20, 2018

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Investment measurements and comparisons have been made using standard performance evaluation methods and results are presented in a manner consistent with the investment industry. Rates of return were determined using a time-weighted return calculation.

Sincerely,

R. Ryan Ball, CFA Senior Vice President



February 15, 2018

Board of Trustees and Executive Director Illinois Municipal Retirement Fund 2211 York Road Oak Brook, IL 60523-2374

To the Board of Trustees and the Executive Director

The Northern Trust Company as Master Trustee has provided detailed financial reports of all investments, receipts, disbursements, purchases and sales of securities and other transactions pertinent to the Fund for the period January 1, 2017, through December 31, 2017. Also, a statement of assets together with their fair market value was provided, showing the properties held as of December 31, 2017. The Northern Trust Company certifies that the statements contained therein are fairly presented and are true and accurate.

In addition to the custody of the assets, The Northern Trust Company provided and will continue to provide the following services as Master Trustee:

- Receive and hold all amounts paid to the Trust Fund by the Board of Trustees.
- Accept and deliver securities in accordance with the instructions of appointed Investment Managers.
- Collect dividends and registered interest payments.
- Collect matured or called securities and coupons.
- Securities Lending.
- Invest cash balances held from time to time in the individual investment management accounts in short term, cash equivalent securities.
- Exercise rights of ownership in accordance with pre-described jurisdiction of stock subscriptions and conversion rights.
- Hold securities in the name of the Master Trust or nominee form.
- Employ agents with the consent of the Board of Trustees.
- 10. Provide disbursement and security fail float income.
- 11. Checking Accounts.
- On-line Trust and Banking reporting.

THE NORTHERN TRUST COMPANY

Kimberly A. Miller Senior Vice President

312-630-6000



#### **INVESTMENT CONSULTANTS**

#### **Master Trustee**

**The Northern Trust Company** 

Kim Miller, Senior Vice President Chicago, Illinois

#### **Performance Evaluation**

**Callan Associates Inc.** 

Janet Becker-Wold, Principal

Denver, Colorado

#### **Investment Consultant**

Callan Associates Inc.

Janet Becker-Wold, Principal

Denver, Colorado

#### **Investment Managers**

**Abbott Capital Management, LLC** 

New York, New York

**ABRY Partners** 

Boston, Massachusetts

**Advent Capital Management, LLC** 

New York, New York

**AEW Capital Management, L.P.** 

Boston, Massachusetts

**Almanac Realty Investors** 

New York, New York

**Ares Management, LLC** 

London, England

**Arga Investment Management, LP** 

Stamford, Connecticut

**Arrowstreet Capital, L.P.** 

Cambridge, Massachusetts

**Artemis Real Estate Partners** 

Chevy Chase, Maryland

**Ativo Capital Management LLC** 

Chicago, Illinois

**AUA Private Equity Partners** 

New York, New York

**Aurora Investment Management** 

Chicago, Illinois

**Barings Capital Management** 

Charlotte, North Carolina

**Barings LLC** 

Hartford, Connecticut

Beecken Petty O'Keefe & Company, LLC

Chicago, Illinois

**BlackRock Financial Management, Inc.** 

New York, New York

The Blackstone Group LP

New York, New York

**BMO Asset Management U.S.** 

Chicago, Illinois

**Brandes Investment Partners, L.P.** 

San Diego, California

**Brookfield Investment Management, Inc.** 

Chicago, Illinois

**Brown Capital Management, Inc.** 

Baltimore, Maryland

**CBRE Global Investors** 

Los Angeles, California

Channing Capital Management, LLC

Chicago, Illinois

**Clearlake Capital Group** 

Santa Monica, California

**Cohen & Steers Capital Management, Inc.** 

New York, New York

**Crescent Capital Group** 

Los Angeles, California

**Crow Holdings Capital** 

Dallas, Texas

**Dimensional Fund Advisors** 

Santa Monica, California

**Dodge & Cox Investment Managers** 

San Francisco, California

**Dune Capital Management LP** 

New York, New York

**EARNEST Partners, LLC** 

Atlanta, Georgia

**EnCap Investments, L.P.** 

Houston, Texas

**Estancia Capital Partners, L.P.** 

Scottsdale, Arizona

**Fidelity Institutional Asset** 

**Management** 

Boston, Massachusetts

**Forest Investment Associates** 

Atlanta, Georgia

**Franklin Templeton Real Estate** 

**Advisors** 

New York, New York

Frontier Capital Management Co.

Boston, Massachusetts

**Garcia Hamilton & Associates, L.P.** 

Houston, Texas

**Genesis Asset Managers** 

International, Ltd.

London, England

**GIA Partners, LLC** 

New York, New York

GlobeFlex Capital, L.P.

San Diego, California

**Glovista Investments, LLC** 

Jersey City, New Jersey

**GTIS Partners** 

New York, New York

**Hancock Natural Resource Group, Inc.** 

Boston, Massachusetts

**ICV Partners** 

New York, New York

Inflexion Private
Equity Partners, LLP

London, England

**Invesco Real Estate** 

Dallas, Texas

**Investment Counselors** 

**of Maryland, LLC**Baltimore, Maryland

#### **INVESTMENT CONSULTANTS** (CONTINUED)

**LaSalle Investment Management** 

Chicago, Illinois

**Lazard Asset Management** 

New York, New York

**Lightspeed Venture Partners** 

Menlo Park, California

**LM Capital Group, LLC** 

San Diego, California

**Longfellow Investment** 

Management Co.

Boston, Massachusetts

**LongWharf Capital** 

Boston, Massachusetts

**LSV Asset Management** 

Chicago, Illinois

**MacKay Shields, LLC** 

New York, New York

**Mavfield Fund** 

Menlo Park, California

**Metis Global Partners** 

San Diego, California

**Mondrian Investment Partners Limited** 

London, England

Muller & Monroe Asset Management, LLC

Chicago, Illinois

**New Century Advisors, LLC** 

Bethesda, Maryland

**New Mainstream Capital** 

New York, New York

**Northern Trust Investments, Inc.** 

Chicago, Illinois

**Oak Street Real Estate Partners** 

Chicago, Illinois

**Pantheon Ventures, Inc.** 

San Francisco, California

**Piedmont Investment Advisors, LLC** 

Durham, North Carolina

**Progress Investment Management** 

**Company** 

San Francisco, California

**Pugh Capital Management** 

Seattle, Washington

Ramirez Asset Management, Inc.

New York, New York

**Resolution Real Estate Advisors, LLP** 

London, England

**Rockwood Capital, LLC** 

New York, New York

**Sands Capital Management, LLC** 

Arlington, Virginia

**Security Capital Markets Group, Inc.** 

Chicago, Illinois

**Smith Graham & Company Investment** 

Advisors, L.P.

Houston, Texas

**Standish Mellon Asset Management** 

Company, LLC

Boston, Massachusetts

**Starwood Capital Group** 

Greenwich, Connecticut

**Strategic Global Advisors, LLC** 

Newport Beach, California

**TA Associates Realty** 

Boston, Massachusetts

**Taplin, Canida & Habacht** 

Miami, Florida

**Templeton Investment Counsel, LLC** 

Fort Lauderdale, Florida

**The Sterling Group** 

Houston, Texas

**The Vistria Group** 

Chicago, Illinois

**Torchlight Investors** 

New York, New York

**Valor Equity Partners** 

Chicago, Illinois

**Versant Venture Management LLC** 

Menlo Park, California

**Vista Equity Partners, LLC** 

Austin, Texas

**Western Asset Management Company** 

Pasadena, California

**William Blair & Company** 

Chicago, Illinois



#### **INVESTMENT POLICIES**

The Board of Trustees, operating within the prudent man framework, has adopted the following investment objectives and guidelines. The objectives and guidelines presented here are intended to be summarizations. Specific contractual objectives and guidelines are in effect for individual investment mandates.

#### A. INVESTMENT OBJECTIVES

- 1. To diversify the investment portfolio so as to optimize investment returns.
- 2. To set investment and actuarial policies that assure the adequate accumulation of assets and maintain a reasonable funded status.
- 3. To achieve rates of return greater than the current actuarial investment assumption of 7.5%.
- 4. To achieve rates of return consistent with expectations for each asset class used, without significantly changing the expected risk profile of the asset class or the investment portfolio.
- 5. To achieve in U.S. equities a total return that exceeds the total return of the Russell 3000 Index.
- 6. To achieve in international equities a total return that exceeds the total return of the Morgan Stanley Capital International All Country World Index Ex-US (MSCI ACWI-Ex U.S.).
- 7. To achieve in fixed income securities a total return that exceeds the total return of the Bloomberg Aggregate Bond Index.
- 8. To achieve in equity real estate investments a return that exceeds the National Council of Real Estate Investment Fiduciaries (NCREIF) Open-End Diversified Core gross of fees (ODCE) Index over a rolling three-year period.
- 9. To achieve in alternative investments an annualized return of 9%.
- 10. To achieve in internally managed short-term securities relative performance better than three-month U.S. Treasury Bills.

#### B. PROXY VOTING GUIDELINES

The Board of Trustees of the Illinois Municipal Retirement Fund (IMRF or the "Fund") recognizes its fiduciary responsibility to prudently manage the assets of the Fund. The assets include common stock in many different companies and, as a shareowner, the Board also owns proxy voting rights. The Board acknowledges that it not only has a right to vote proxies, but also a duty to vote them. Proxies have economic value and, therefore, the Board has the duty to prudently oversee the management of them as it does all other Fund assets.

The Board shall vote proxies in accordance with the exclusive benefit rule which requires the Board to act solely in the economic interest of the Fund's members and beneficiaries.

Generally, proxies related to corporate governance shall be voted in favor of shareholder-sponsored proposals requiring corporate boards to act in the best interests of shareholders. Proxies related to director, executive, and employee compensation shall be voted in favor of compensation plans that motivate directors, executives, and employees to achieve high performance for the long-term benefits of all shareowners. Proxies related to takeover defenses shall be voted in favor of proposals allowing shareholders to vote on poison pills and golden parachutes. Proxies related to capital structure issues shall be voted in favor of proposals requiring shareowner approval for reasonable share increases needed for business purposes. Proxies related to mergers, acquisitions, and corporate restructuring will be voted on a case-by-case basis. Proxies related to routine management issues shall generally be voted in accordance with management's view on such issues. In keeping with the Board's fiduciary duty to act solely in the economic interest of the Fund, and because empirical evidence is inconclusive about whether all social and political proposals enhance shareowner value, IMRF will abstain from voting on such proposals.

#### C. DOMESTIC EQUITY INVESTMENT GUIDELINES

- 1. Generally, no individual security shall comprise more than 5% of the total portfolio at market value.
- 2. The total portfolio shall generally not hold more than 5% of the outstanding shares of any one company.
- 3. Holdings of any one issuer, at the time of purchase, shall generally be limited to not more than 15% of a manager's portfolio market value.
- 4. Sector exposure in the total portfolio shall generally not differ by more than five percentage points from the sector exposure of the Russell 3000 Index.
- 5. Domestic equity managers must invest in equity securities that are listed on principal U.S. exchanges or traded over the counter. American Depository Receipts (ADRs) of foreign companies are permissible.

#### D. INTERNATIONAL EQUITY INVESTMENT GUIDELINES

- 1. Generally, no individual security shall comprise more than 6% of the total portfolio at market value.
- 2. The total portfolio shall generally not hold more than 5% of the outstanding shares of any one company.
- 3. Holdings of any one issuer, at the time of purchase, shall generally be limited to a maximum of 8% of a manager's portfolio market value.
- 4. Sector exposure in the portfolio shall not exceed the higher of 25% or two times the benchmark weighting at market value.
- 5. Country exposure in the portfolio shall not exceed the higher of 25% or two times the benchmark weighting at market value.
- 6. International equity managers shall generally invest in equity securities of companies domiciled outside of the U.S. They may be allowed to invest in U.S. domiciled companies that operate, and/or generate revenues primarily outside the U.S.
- 7. International equity managers may engage in various transactions to manage currency. Forward contracts, futures, and options may be used for currency management purposes. Currency trading may not be used for speculative purposes unless otherwise specified in individual manager guidelines.

#### E. FIXED INCOME INVESTMENT GUIDELINES

- 1. Bonds, notes, or other obligations of indebtedness issued or guaranteed by the U.S. government, its agencies, or instrumentalities may be held without restriction.
- 2. The average credit quality of the total fixed income portfolio must be investment grade.
- 3. Debt obligations of any single U.S. corporation shall generally be limited to a maximum of 5% of the total fixed income portfolio at market value.
- 4. Generally, no more than 30% of an investment manager's assets at market value may be invested in securities rated below investment grade at the time of purchase. Investment managers outside of core and core plus mandates are not subject to this restriction.
- 5. Bonds or other debt obligations of foreign countries and corporations payable in U.S. dollars and foreign currency are authorized, but in general will not exceed 15% of total fixed income portfolio.
- 6. Individual manager portfolios shall have an effective duration between 80% and 120% of the index for mandates benchmarked against the Barclays Capital Aggregate Index or the Merrill Lynch High Yield Cash Pay Index.
- 7. The use of swaps, exchange-traded financial futures, exchange-traded options on financial futures, and over-the-counter options are subject to individual manager guidelines. Managers are not permitted to utilize these transactions for speculative purposes. Leverage is not allowed except as permitted for rolling mortgage pass-through securities.
- 8. No assets shall be committed to short sale contracts.



### F. EQUITY REAL ESTATE INVESTMENT GUIDELINES

The primary role of the global real estate program is to provide diversification benefits to the total Fund through low correlations with other portfolio asset classes. The secondary role is to generate income and provide protection against inflation.

- 1. The maximum commitment to any private real estate manager shall be 40% of the total real estate portfolio value plus unfunded commitments at the time of due diligence.
- 2. IMRF will seek property type diversification at the total private real estate portfolio level and any single private real estate investment may not be fully diversified. Investments may include office, retail, industrial, multi-family, and other non-traditional categories such as hotels, self-storage, data centers, student housing, land, and other property types.
- 3. IMRF will seek geographic and economic diversification at the total private real estate portfolio level. Any given investment may not be diversified on a stand-alone basis. Although IMRF may invest in strategies where investments are located outside of the U.S., exposure to these dedicated strategies is limited to 25% of the total real estate portfolio value plus unfunded commitments at the time of due diligence.
- 4. IMRF's long-term strategic target to core real estate investments is 60% with a minimum of 50%.
- 5. Modest amounts of leverage may be used as a means of enhancing the overall risk adjusted returns. Leverage at the total real estate portfolio level will be kept below 50% loan to value.
- 6. Publicly traded real estate securities will not exceed 20% of the total real estate portfolio plus unfunded commitments at the time of due diligence.
- 7. The majority of real estate investments will consist of equity ownership in commercial real estate. Managers whose sole strategy is to invest in non-equity or debt strategies will not exceed 25% of the total real estate portfolio plus unfunded commitments at the time of due diligence.

#### G. ALTERNATIVE INVESTMENT GUIDELINES

The Alternative Investment Portfolio will consist of venture capital, buyout, mezzanine, special situation, timber, agriculture, and absolute return investments. The investments will be made to generate long-term returns in a diversified manner. The investments will generally be made through limited partnership structures in which IMRF commits a fixed amount that the General Partner will invest over several years. The partnership structure may cover periods of 10 years or more. IMRF understands and recognizes that the alternative asset class will not be structured in a way to provide short-term cash flow needs for the Fund.

Exposure to dedicated non-U.S. strategies will be limited to 30% of the total alternative investments portfolio value plus unfunded commitments at the time of due diligence.

The maximum commitment to any direct alternative manager shall be 40% of the total alternative investments portfolio value plus unfunded commitments at the time of due diligence.

#### H. SHORT-TERM INVESTMENT GUIDELINES

Permissible short-term investments are U.S. Treasury Bills and Notes, high-grade commercial paper, repurchase agreements, banker's acceptances, and certificates of deposit. Commercial paper investments shall be made in instruments rated "A-2" or "P-2" or better, as defined by a recognized rating service. Comparable ratings are required for banker's acceptances and certificates of deposit. No more than \$50 million of current market value shall be invested in the securities of any one issuer, with the exception of the U.S. government and its agencies. Idle cash balances swept by the custodian bank shall be invested in a constant \$1 Net Asset Value vehicle. The objective is to generate current income that is consistent with preservation of capital and maintenance of liquidity.



### **RETURNS BY ASSET CLASS** (Periods ending December 31)

							Annualized	
	2017	2016	2015	2014	2013	3 Yrs	5 Yrs	10 Yrs
Total Fund Time - Weight	ed Returns							
IMRF - Gross of Fees	15.96%	8.00%	0.44%	6.01%	20.26%	7.98%	9.94%	6.85%
IMRF - Net of Fees	15.73%	7.77%	0.20%	5.76%	19.99%	7.75%	9.70%	6.62%
CPI (Inflation)	2.11%	2.07%	0.73%	0.76%	1.50%	1.64%	1.43%	1.61%
Equities - U.S.								
IMRF - Gross of Fees	19.83%	12.62%	0.02%	9.81%	37.64%	10.52%	15.33%	8.59%
IMRF - Net of Fees	19.60%	12.35%	(0.24)%	9.54%	37.33%	10.27%	15.06%	8.33%
Dow Jones U.S. Total Stock Market Index	21.13%	12.74%	0.48%	12.55%	33.57%	11.12%	15.58%	8.60%
Russell 2000	14.65%	21.31%	(4.41)%	4.89%	38.82%	9.96%	14.12%	8.71%
<b>Equities - International</b>								
IMRF - Gross of Fees	27.91%	3.54%	(1.90)%	(2.79)%	20.24%	9.13%	8.72%	2.99%
IMRF - Net of Fees	27.53%	3.21%	(2.21)%	(3.10)%	19.86%	8.77%	8.37%	2.66%
MSCI ACWI Ex-U.S.	27.19%	4.50%	(5.66)%	(3.87)%	15.29%	7.83%	6.80%	1.84%
MSCI EAFE	25.03%	1.00%	(0.81)%	(4.90)%	22.78%	7.80%	7.90%	1.94%
Fixed Income								
IMRF - Gross of Fees	4.80%	4.85%	0.09%	5.93%	(0.59)%	3.28%	3.02%	5.12%
IMRF - Net of Fees	4.67%	4.71%	(0.04)%	5.78%	(0.75)%	3.14%	2.87%	4.98%
Bloomberg Aggregate	3.54%	2.65%	0.55%	5.97%	(2.02)%	2.24%	2.10%	4.01%
Bloomberg Government/ Credit	4.00%	3.05%	0.15%	6.01%	(2.35)%	2.38%	2.13%	4.08%
Merrill Lynch High Yield	7.48%	17.34%	(4.55)%	2.45%	7.38%	6.38%	5.78%	7.82%
Real Estate								
IMRF - Net of Fees	9.10%	8.97%	11.99%	12.66%	10.60%	10.17%	10.86%	5.09%
Real Estate Benchmark	6.66%	7.79%	13.95%	11.46%	14.96%	9.42%	10.52%	6.77%
Alternative Investments								
IMRF - Gross of Fees	12.15%	5.43%	6.34%	9.04%	13.61%	8.08%	9.58%	5.76%
IMRF - Net of Fees	11.97%	5.11%	5.95%	8.47%	13.33%	7.77%	9.25%	5.47%
Cash & Cash Equivalents								
IMRF	1.67%	0.63%	0.29%	0.17%	0.11%	0.87%	0.58%	(2.49)%
U.S. Treasury Bills	0.86%	0.33%	0.05%	0.03%	0.07%	0.41%	0.27%	0.39%

These investment results are calculated and presented using standard performance evaluation methods in a manner consistent with the investment industry in general and public pension funds in particular. Rates of return were determined using a modified time-weighted return calculation.

Source: Callan Associates Portfolio Evaluation Program.

Due to the implementation of the GASB Statement No.72 for the Financial section of this report, the returns above may not compare to the corresponding groupings due to reclassifications.



## **SCHEDULE I**

Investment Portfolio Summary (In millions of dollars)

	As of Decer	As of December 31, 2017		mber 31, 2016
	Fair Value	Percent of Total Fair Value	Fair Value	Percent of Total Fair Value
Fixed Income				
Government & Agencies	\$ 3,097.2	7.5%	\$ 3,214.7	8.9%
Corporate	2,984.6	7.2	2,811.2	7.7
Index Funds	3,320.3	8.1	2,948.6	8.1
Foreign	1,404.5	3.4	1,031.3	2.8
Total Fixed Income	10,806.6	26.2	10,005.8	27.5
Stocks				
U.S. Common & Preferred	11,891.8	28.8	10,607.5	29.2
U.S. Stock Funds	5,716.9	13.9	5,184.0	14.2
Foreign Common & Preferred	5,158.3	12.5	3,781.4	10.4
Foreign Stock Funds	3,121.5	7.6	2,651.2	7.3
Total Stocks	25,888.5	62.8	22,224.1	61.1
Real Estate				
Commingled Funds	1,891.3	4.6	1,631.8	4.5
Directly Owned	659.0	1.6	643.9	1.8
Total Real Estate	2,550.3	6.2	2,275.7	6.3
<b>Private Equity Investments</b>	1,315.4	3.2	1,137.9	3.1
Short-Term Investments	654.0	1.6	720.8	2.0
Total Portfolio	\$ 41,214.8	100.0%	\$ 36,364.3	100%



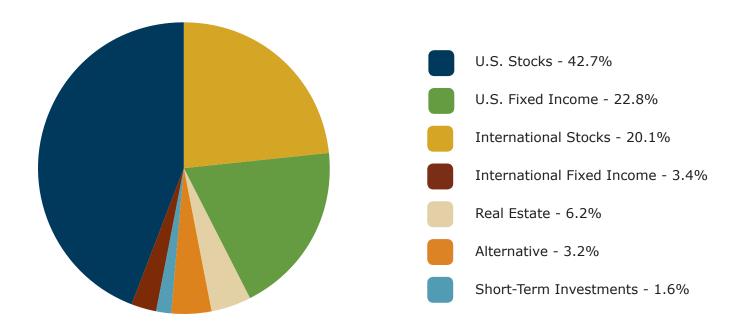
## **SCHEDULE II**

Asset Allocation (Last five years)

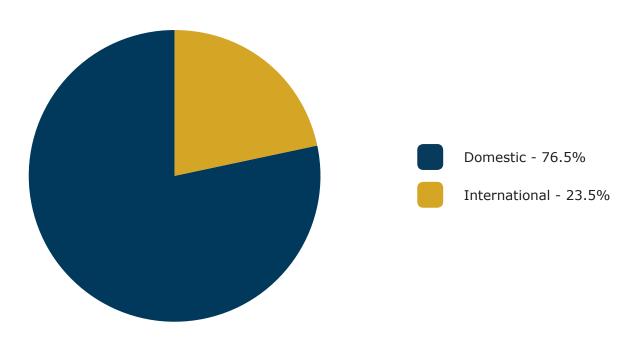
	Fair Value as a Percent of Portfolio					
	2017	2016	2015	2014	2013	
Fixed Income						
U.S. Government & Agencies	7.5%	8.9%	8.9%	8.2%	7.6%	
Corporate	7.2	7.7	7.6	7.2	8.6	
Index Fund	8.1	8.1	8.4	8.1	8.0	
Foreign	3.4	2.8	2.8	2.6	1.8	
Total Fixed Income	26.2	27.5	27.7	26.1	26.0	
Stocks						
U.S. Common & Preferred	28.8	29.2	28.9	30.8	31.4	
U.S. Stock Funds	13.9	14.2	13.1	13.3	13.6	
Foreign Common & Preferred	12.5	10.4	10.4	10.7	10.7	
Foreign Stock Funds	7.6	7.3	7.9	8.4	8.9	
Total Stocks	62.8	61.1	60.3	63.2	64.6	
Real Estate						
Commingled Funds	4.6	4.5	4.2	3.5	2.5	
Directly Owned	1.6	1.8	1.8	1.5	1.5	
Total Real Estate	6.2	6.3	6.0	5.0	4.0	
Private Equity Investments	3.2	3.1	4.1	3.8	3.0	
Short-Term Investments	1.6	2.0	1.9	1.9	2.4	
Total Portfolio	100.0%	100.0%	100.0%	100.0%	100.0%	

## INVESTMENT PORTFOLIO (AS OF DECEMBER 31, 2017)

### **ALLOCATION BY ASSET CLASS**



## **TOTAL INVESTMENTS BY REGION**





#### **TEN LARGEST FIXED INCOME INVESTMENT HOLDINGS**

As of December 31, 2017 (Excludes commingled funds and short-term investments)

Investment Income Holdings	Market Value	Percent of Total Invested Market
U.S. Treasury Bonds 2.5% Due 5/15/2046	\$ 104,418,712	0.25%
U.S. Treasury Notes 2.375% Due 8/15/2024	98,614,855	0.24
U.S. Treasury Bonds 2.875% Due 8/15/2045	93,463,226	0.23
U.S. Treasury Notes 2.0% Due 2/15/2023	75,639,886	0.18
U.S. Treasury Notes 0.75% Due 1/31/2018	58,717,620	0.14
U.S. Treasury Notes 1.625% Due 2/15/2026	56,993,031	0.14
Farm Credit Bonds 1.64213% Due 5/25/2018	47,993,364	0.12
U.S. Treasury Bonds 2.125% Due 5/15/2025	43,175,355	0.10
U.S. Treasury Notes 3.0% Due 5/15/2047	41,907,489	0.10
U.S. Treasury Bonds 4.75% Due 2/15/2037	37,035,911	0.09
Total	\$ 657,959,449	1.59%

## TEN LARGEST EQUITY INVESTMENT HOLDINGS (Excludes commingled funds)

Equity Investment Holdings	Market Value Percent of T Invested Ma		
Bank of America Corp.	\$ 192,262,520	0.47%	
Facebook, Inc.	183,412,700	0.45	
Visa, Inc.	168,958,713	0.41	
Wells Fargo & Co.	159,073,342	0.39	
Apple, Inc.	155,526,262	0.38	
JP Morgan Chase & Co.	152,023,017	0.37	
Microsoft Corp.	149,604,755	0.36	
Johnson & Johnson, Inc.	149,027,168	0.36	
Alphabet, Inc.	143,936,576	0.35	
Amazon, Inc.	133,604,931	0.32	
Total	\$ 1,587,429,984	3.86%	

A complete listing of investments is available on IMRF's website, www.imrf.org.



## **SCHEDULE OF 2017 DOMESTIC BROKERAGE COMMISSIONS** (In order of commission received)

Broker Name	Total Shares	Commission	Per	Share
Goldman Sachs New York	22,497,899.00	\$ 230.64	\$	-
ITG Inc.	9,515,569.00	111,431.83		0.01
Loop Capital Markets LLC	9,048,865.00	239,285.10		0.03
Jones Trading Institutional Services LLC	8,491,993.00	222,939.63		0.03
Penserra Securities LLC	7,553,876.00	118,173.67		0.02
Credit Suisse Securities (USA) LLC	7,327,758.00	98,251.91		0.01
Capital Institutional Services Inc.	6,911,373.00	260,243.45		0.04
JP Morgan Chase Bank/HSBCSI	6,170,000.00	-		-
Cantor Fitzgerald & Co.	5,480,621.00	128,937.17		0.02
Drexel Hamilton LLC	4,640,915.00	92,818.30		0.02
UBS Securities Asia Limited	3,979,458.00	11,161.88		-
Instinet LLC	3,916,041.00	113,517.25		0.03
Morgan Stanley & Co. LLC	3,886,161.00	50,180.01		0.01
RBC Capital Markets LLC	3,802,876.00	136,923.79		0.04
Bank Of America Corporation	3,794,408.00	72,397.77		0.02
Merrill Lynch International Limited	3,750,280.00	42,034.65		0.01
Mischler Financial Group Inc.	3,702,585.00	61,308.78		0.02
Sanford C. Bernstein & Co. LLC	3,694,509.00	60,237.23		0.02
Fidelity Capital Markets (Div Of NFSC)	3,457,396.00	60,359.22		0.02
JP Morgan Securities LLC	3,319,545.00	50,938.53		0.02
Raymond James & Associates	3,311,981.00	122,724.54		0.04
Goldman Sachs and Co.	3,298,611.00	63,353.46		0.02
Liquidnet Inc.	3,068,983.00	71,791.10		0.02
Merrill Lynch Piece Fenner & Smith	3,050,658.00	38,405.28		0.01
Stifel Nicolaus & Company Inc.	3,028,373.00	105,445.24		0.03
BTIG LLC	2,849,672.00	53,882.00		0.02
The Williams Capital Group LP	2,713,493.00	67,605.24		0.02
Cabrera Capital Markets LLC	2,658,866.00	39,296.96		0.01
Weeden and Co.	2,539,327.00	47,469.62		0.02
Other Brokers	73,701,107.46	1,606,152.33		0.02
Total	225,163,199.46	\$ 4,147,496.58	\$	0.02



## **SCHEDULE OF 2017 INTERNATIONAL BROKERAGE COMMISSIONS** (*In order of commission received*)

Broker Name	Total Shares	Commission	Per Share
CLSA Limited	51,269,276.00	\$ 69,723.55	\$ -
BNY Convergex Execution Solutions	41,637,942.00	581,816.00	0.01
Instinet Europe Limited	29,794,284.00	407,987.87	0.01
Goldman, Sachs and Co.	26,643,870.00	218,553.52	0.01
Instinet Pacific Limited	22,407,059.00	54,079.06	-
Merrill Lynch International Limited	17,807,214.00	87,675.26	-
UBS Limited	16,422,659.00	127,522.90	0.01
Investment Technology Group Ltd.	15,011,640.00	105,931.52	0.01
Citigroup Global Markets Inc.	13,689,161.00	63,563.61	-
Celfin Cap SA Corredores De Bolsa	13,604,200.00	6,000.85	-
UBS Securities Asia Limited	13,113,054.00	83,537.94	0.01
Societe Generale London Branch	11,412,408.00	81,334.60	0.01
UBS AG Stamford Branch	10,347,223.00	45,648.87	-
Citigroup Global Markets Limited	9,796,807.00	29,898.11	-
Goldman Sachs International	9,629,008.00	22,674.94	-
Morgan Stanley and Co. LLC	9,624,972.00	51,391.54	0.01
Sanford C. Bernstein and Co. LLC	8,835,843.00	34,943.42	-
Macquarie Bank Limited	8,511,175.00	37,173.73	-
JP Morgan Securities PLC	8,182,146.00	77,835.96	0.01
HSBC Bank PLC	7,910,910.00	37,625.77	-
CLSA Singapore Pte Ltd.	7,825,548.00	113,671.59	0.01
Sanford C. Bernstein Ltd.	7,213,909.00	36,942.53	0.01
CLSA Australia Pty Ltd.	7,190,489.00	52,370.29	0.01
Credit Suisse Securities (USA) LLC	7,187,180.00	32,109.82	-
Nomura International (Hong Kong) Taipei Branch	7,019,100.00	13,620.13	-
HSBC Securities (USA) Inc.	6,835,632.00	39,780.91	0.01
Credit Suisse Securities (Europe) Ltd.	6,639,504.00	41,084.52	0.01
Merrill Lynch Piece Fenner & Smith	6,437,199.00	27,167.87	-
JP Morgan Securities (Asia Pacific)	5,625,695.00	10,125.08	-
Other Brokers	139,589,654.56	1,277,396.06	0.01
Total	547,214,761.56	\$ 3,869,187.82	\$ 0.01



### **SCHEDULE OF INVESTMENT FEES**

	2017 Fees	2017 Assets under management at year end (in thousands)*	Basis Points	2016 Fees	2016 Assets under management at year end (in thousands)*	Basis Points
Investment manager fees						
Fixed income managers	\$ 13,558,197	\$ 10,140,087	13	\$ 13,410,705	\$ 9,458,143	14
Stock managers	31,228,610	17,295,394	18	33,788,027	15,748,132	21
International managers	28,657,597	10,041,226	29	25,348,883	7,734,258	33
Real estate managers	24,870,802	2,303,370	108	24,742,962	2,018,987	123
Alternative investment managers	15,853,588	1,406,324	127	13,531,903	1,337,459	101
Total	\$114,168,794	\$ 41,186,401		\$ 110,822,480	\$ 36,296,979	
Other investment fees						
Master trustee fees	\$ 280,000			\$ 280,000		
Investment consulting fees	1,176,287			928,455		
Total investment fees	115,625,081			112,030,935		
Non-fee investment expenses	505,363			490,437		
Total direct investment expenses	\$116,130,444			\$112,521,372		

Securities lending fees		
Management fees and borrower rebates	\$ 733,764	\$ 764,062

 $<sup>*</sup>Assets\ under\ management\ includes\ accrued\ investment\ income\ and\ unsettled\ trades.$ 

## **ACTUARIAL**

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# STABILITY



Stability. After almost eight decades in existence, IMRF's promise still rings true: to efficiently and impartially develop, implement, and administer programs that provide income protection to members and their beneficiaries. IMRF takes this mission seriously—in every decision and investment we make. As the pension landscape continues to change in Illinois, IMRF is unwavering in its commitment to enhancing the lives of public employees, both today and long into the future.





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April 5, 2018

Board of Trustees Illinois Municipal Retirement Fund 2211 S. York Road, Suite 500 Oak Brook, Illinois 60523-2374

#### Dear Board Members:

The basic financial objective of the Illinois Municipal Retirement Fund (IMRF) is to establish and receive contributions which:

- When expressed in terms of percents of active member payroll will remain approximately level from generation to generation, and
- When combined with present assets and future investment returns will be sufficient to meet the financial obligations of IMRF to present and future retirees and beneficiaries.

The financial objective is addressed within the annual actuarial valuation of the IMRF.

The purposes of the valuation are to: 1) Measure the financial position of IMRF, and 2) Develop 2019 employer contribution rates that are sufficient to fund each participating employer's normal cost (i.e., the costs assigned by the valuation method to the year of service about to be rendered), as well as to fund unfunded actuarial accrued liabilities as a level percent of active member payroll. The valuations cannot be relied upon for any other purpose.

The most recent funding valuation was completed based upon population data, asset data, and plan provisions as of December 31, 2017, and issued on March 22, 2018. The individual member statistical data required for the valuations was furnished by your Executive Director and Staff, together with pertinent data on financial operations. Their cooperation in furnishing these materials is acknowledged with appreciation. We are not responsible for the accuracy or completeness of the data. We checked the information provided for internal and year-to-year consistency, but did not audit the data. A report containing the results of the funding valuation is produced annually.

The following schedules in the Actuarial Section and Financial Section of the CAFR were prepared based upon certain information presented in the previously mentioned funding valuation report. The actuary provided the Brief Summary of Assumptions directly. In the case of the other schedules, IMRF Staff excerpted information from various schedules in the actuarial reports and tabulated it to produce the appropriate CAFR Schedule.



Board of Trustees Illinois Municipal Retirement Fund April 5, 2018 Page 2

#### **Actuarial Section**

**Brief Summary of Assumptions** 

**Schedules of Funding Progress** 

Schedule of Employer Contributions

Solvency Test

**Participating Member Statistics** 

**Actuarial Balance Sheet** 

Analysis of Unfunded Liability

Derivation of Experience Gain (loss)

#### **Financial Section**

**Schedules of Funding Status** 

Schedule of Funding Progress

Average Employer Contribution rates

The December 31, 2017 valuations were based upon assumptions that were recommended in connection with a study of experience covering the 2014-2016 period. A brief summary of the assumptions and methods is attached.

All assumption and methods comply with relevant actuarial standards of practice. The funding valuation complies with the Board's funding policy. If the funding policy is followed and all assumptions are realized exactly, contributions to the plan will stay approximately level, and the plan will gradually approach 100% funding over a very long period of years.

As of the valuation date, in the aggregate, IMRF is 92.9% funded based upon the smoothed value of assets and 97.9% funded based upon market value. Each participating employer, however, has a separate funding percent, some of which will be above the aggregate result, and others of which will be below it. Based upon the results of the December 31, 2017 valuations, we are pleased to report to the Board that the Illinois Municipal Retirement Fund is meeting its basic financial objective and continues to operate in accordance with the actuarial principles of level percent-of-payroll financing.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.





Board of Trustees Illinois Municipal Retirement Fund April 5, 2018 Page 3

Readers desiring a more complete understanding of the actuarial condition of IMRF are encouraged to obtain and read the complete valuation reports. The material in the Actuarial Section and Financial Section of this CAFR contains some, but not all of, the information in the valuation reports.

Brian B. Murphy, Mark Buis, and Francois Pieterse are Members of the American Academy of Actuaries (MAAA), are independent of the plan sponsor and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,

Brian B. Murphy, FSA, EA, FCA, MAAA

Mark Buis, FSA, EA, FCA, MAAA

Francois Pieterse, ASA, FCA, MAAA

BBM/MB/FP:sc Enclosure



# Illinois Municipal Retirement Fund Brief Summary of Actuarial Assumptions Used in 2017 Valuations (Adopted as of December 31, 2016, except as noted below)

**Investment Return** 7.5% per annum, compounded annually, net of expenses (effective

December 31, 1991), including a price inflation component of 2.50%.

**Payroll Growth** 2.50% per annum, compounded annually.

**Retirement Rates** Rates vary by age and sex. See table below for sample values.

Mortality for Actives and Annuitants

For non-disabled retirees, an IMRF specific mortality table was used with fully generational projection scale MP-2017 (base year 2015). The IMRF specific rates were developed from the RP-2014 Blue Collar Healthy Annuitant Mortality Table with adjustments to match current IMRF experience. For disabled retirees, an IMRF specific mortality table was used with fully generational projection scale MP-2017 (base year 2015). The IMRF specific rates were developed from the RP-2014 Disabled Retirees Mortality Table applying the same adjustments that were applied for non-disabled lives. For active members, an IMRF specific mortality table was used with fully generational projection scale MP-2017 (base year 2015). The IMRF specific rates were developed from the RP-2014 Employee Mortality Table with adjustments to match current IMRF experience. Among the active members,

75% of males and 70% of females were assumed to be married.

**Disability** Graduated rates by age. See table below for sample values.

Separation and Salary Increases

Graduated rates by age and service. See table below for sample values.

**Asset Valuation Method** 

Market Related Value that reflects five-year averaging of investment gains and

losses, subject to a 20% corridor.

**Liability Valuation Method** 

For the purposes of determining contribution rates, the Entry Age Actuarial Cost Method is applied on an aggregate basis. Gains and Losses become part of unfunded liabilities.

	S	ample Proba						
	Active Mortality		Disa	ability	Pay Increase Next Year			
Age	Male	Female	Male Female		(5+ Yrs. of Service)			
20	0.06%	0.02%	0.00%	0.00%	5.75%			
30	0.06%	0.02%	0.00%	0.00%	5.27%			
40	0.10%	0.05%	0.02%	0.01%	4.23%			
50	0.25%	0.13%	0.04%	0.02%	3.73%			
60	0.64%	0.31%	0.08%	0.05%	3.39%			
65	1.23%	0.49%	0.09%	0.06%	3.39%			

	Separation								
	Regula	ır				Retiremen	t (Tier 1)		
	(8+ Yrs. S	erv.)	SLEP	Reduced Early		Normal Unreduced		SLEP Service	
Age	Male	Female	(7+ Yrs.)	Male	Female	Male	Female	(< 32 Yrs.)	(32+ Yrs.)
30	4.4%	7.3%	2.4%	-	-	-	-	-	-
35	3.5%	5.8%	1.8%	-	-	-	-	-	-
40	2.8%	4.4%	1.3%	-	-	-	-	-	-
45	2.3%	3.6%	1.2%	-	-	-	-	-	-
50	2.0%	3.0%	1.2%	-	-	-	-	27.0%	35.0%
55	-	-	-	7.10%	6.00%	37.0%	26.0%	24.0%	35.0%
60	-	-	-	-	-	13.0%	11.0%	20.0%	35.0%
65	-	-	-	-	-	25.0%	26.0%	30.0%	35.0%
70	-	-	-	-	-	22.0%	23.0%	100.0%	100.0%



#### **FUNDED STATUS AND FUNDING PROGRESS**

As of December 31, 2017, the most recent actuarial valuation date, the plan on an aggregate basis was 92.9% funded on an actuarial basis. The actuarial accrued liability for benefits was \$42.2 billion, and the actuarial value of assets was \$39.2 billion, resulting in an unfunded actuarial accrued liability (UAAL) of \$3.0 billion. The covered payroll (annual payroll of active employees covered by the plan) was \$7.1 billion, and the ratio of the UAAL to the covered payroll was 42.0%.

The schedule of funding progress presents multi-year trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liability for benefits.

## ADDITIONAL INFORMATION AS OF THE LATEST ACTUARIAL VALUATION **FOLLOWS:**

Valuation date	December 31, 2017					
Actuarial cost method	_Entry age normal					
Amortization method	Level percent of payroll for Regular and SLEP; level dollars for ECO					
Amortization periodTaxing bodies: closed, 24 years						
	Entities over 120% funded on a market basis: varies by funding status					
	Non-taxing bodies: open, 10 years					
Asset valuation method	"Five-year smoothed market related with a 20% corridor					

### **ACTUARIAL ASSUMPTIONS:**

Investment rate of return	7.5%
Projected salary increases	3.39% to 14.25%
Assumed wage inflation rate	3.25%
Group size growth rate	0.0%
Assumed payroll growth rate	2.5%
Post-retirement increase	Tier 1 - 3.0%—simple
	Tier 2 - 3.0%—simple or 1/2 increase in CPI, whichever is less
Mortality table	For non-disabled retirees, an IMRE specific mortality table was i

For non-disabled retirees, an IMRF specific mortality table was used with 2-dimensional, fully generational improvements using the MP-2017 Mortality Improvement Scale (base year 2015). The IMRF specific rates were developed from the RP-2014 Blue Collar Mortality Table with adjustments to match current IMRF experience. For disabled retirees, an IMRF specific mortality table was used with 2-dimensional, fully generational improvements using the MP-2017 Mortality Improvement Scale. The IMRF specific rates were developed using the RP-2014 Disabled Mortality Table with adjustments to match current IMRF experience. For active members, the mortality rates are based on the RP-2014 Employee Mortality Table for both males and females with 2-dimensional, fully generational improvements using the MP-2017 Mortality Improvement Scale. Among active members, 75% of males and 70% of females were assumed to be married.



**TABLE I**Schedule of Aggregate Funding Progress (Last ten years)

	Aggregate	Actuarial Liabilities (A	AL)	Unfunded A	Actuarial Liabilities (	UAL)
Actuarial Valuation Date December 31	Total AAL Entry Age (a)	Entry Age Actuarial Assets a percent		Total UAL (a-b)	Member Payroll (c)	UAL as a percent of Member Payroll (a-b)/c
2008*	\$25,611,199,349	\$21,601,053,512	84.3%	\$4,010,145,837	\$6,259,283,197	64.1%
2009	27,345,113,216	22,754,803,784	83.2	4,590,309,432	6,461,696,602	71.0
2010	29,129,228,239	24,251,136,889	83.3	4,878,091,350	6,391,164,701	76.3
2011*	30,962,815,428	25,711,287,584	83.0	5,251,527,844	6,431,296,235	81.7
2012	32,603,244,099	27,491,809,785	84.3	5,111,434,314	6,496,076,569	78.7
2013	34,356,575,473	30,083,042,548	87.6	4,273,532,925	6,602,479,436	64.7
2014*	37,465,147,612	32,700,208,537	87.3	4,764,939,075	6,732,500,876	70.8
2015	39,486,573,890	34,913,127,469	88.4	4,573,446,421	6,919,337,807	66.1
2016	41,358,710,402	36,773,397,527	88.9	4,585,312,875	7,006,710,264	65.4
2017*	42,179,482,656	39,187,802,312	92.9	2,991,680,344	7,127,492,621	42.0

 $<sup>*</sup>A fter\ assumption\ change$ 

This data was provided by the Actuary.

**TABLE II**Schedule of Aggregate Employer Contributions (Last ten years)

Year Ended December 31	Normal Contributions	Amortization of Unfunded Actuarial Liability	Death & Disability Benefit Contributions	Supplemental Retirement Benefit Contributions	Total Contributions	Percentage of Actuarial Required Contribution Contributed
2008	\$ 463,833,388	\$ 106,266,646	\$ 21,844,517	\$ 39,202,925	\$ 631,147,476	100%
2009	478,760,517	119,391,054	21,417,551	40,830,286	660,399,408	100
2010	483,792,012	225,268,536	20,582,277	40,499,453	770,142,278	91
2011	486,731,753	254,898,222	18,654,559	40,519,719	800,804,253	95
2012	503,108,449	317,890,978	21,340,072	40,876,782	883,216,281	98
2013	512,289,897	356,734,526	20,344,350	41,600,283	930,969,056	99
2014	513,293,254	348,081,564	19,531,784	42,476,223	923,382,825	100
2015	518,959,516	317,936,978	19,973,953	43,606,437	900,476,884	100
2016	478,995,396	390,798,313	20,170,190	43,973,422	933,937,321	100
2017	477,803,406	361,773,832	19,107,613	44,797,180	903,482,031	100

## **ACTUARIAL**

**TABLE III** 

Solvency Test (Last ten years)

	Aggreg	ate Actuarial Liabilitie	es (AAL)		Actu	Portion of arial Liabi ered by As	ilities
Calendar Year	Active Member Contributions (1)	Annuitants (2)	Active Members (Employer Financed Portion) (3)	Actuarial Assets	(1)	(2)	(3)
2008	\$ 4,573,736,116	\$ 10,025,599,295	\$ 11,011,863,938	\$ 21,601,053,512	100%	100%	63.6%
2009	4,893,022,745	10,903,323,478	11,548,766,993	22,754,803,784	100	100	60.3
2010	5,153,902,881	12,121,959,266	11,853,366,092	24,251,136,889	100	100	58.8
2011	5,417,822,062	13,388,018,799	12,156,974,567	25,711,287,584	100	100	56.8
2012	5,705,336,025	14,482,560,758	12,415,347,316	27,491,809,785	100	100	58.8
2013	5,957,217,332	15,753,071,341	12,646,286,800	30,083,042,548	100	100	66.2
2014	6,262,110,058	17,885,026,667	13,318,010,887	32,700,208,537	100	100	64.2
2015	6,488,892,894	19,506,345,352	13,491,335,644	34,913,127,469	100	100	66.1
2016	6,714,120,028	21,085,519,077	13,559,071,297	36,773,397,527	100	100	66.2
2017	6,924,946,616	22,007,921,865	13,246,614,175	39,187,802,312	100	100	77.4

Total obligation and actuarial value of assets calculated by the Actuary.

**TABLE IV**Participating Member Statistics (Last ten years)

Calendar Year	Total Salaries	Percent Increase (Decrease) in Total Salaries	Average Annual Salary	Percent Increase in Average Salary	Number of Participating Members	Average Attained Age	Average Years of Service
2008	\$ 6,259,283,197	5.5%	\$ 34,655	3.1%	\$ 181,678	46.8	9.6
2009	6,461,696,602	3.2	35,771	3.2	181,380	47.1	9.8
2010	6,391,164,701	(1.1)	36,277	1.4	176,703	47.5	10.3
2011	6,431,296,235	0.6	36,701	1.2	175,844	47.7	10.4
2012	6,496,076,569	1.0	37,252	1.5	174,771	47.8	10.6
2013	6,602,479,436	1.6	38,059	2.2	173,481	47.9	10.7
2014	6,732,500,876	2.0	38,786	1.9	173,579	47.9	10.6
2015	6,919,337,807	2.8	39,805	2.6	173,832	47.9	10.6
2016	7,006,710,264	1.3	40,076	0.7	174,835	47.8	10.5
2017	7,127,492,621	1.7	40,597	1.3	175,566	47.8	10.4

Source for salaries, average annual salary, attained age, and service is in the Actuarial Report.



## **TABLE V**

Schedule of Adds and Removals from Rolls (Last ten years)

#### Schedule of Retirees and Beneficiaries Added to and Removed from Rolls

	Add	ed to Rolls	Remove	ed from Rolls	End (	of Year Rolls		
Calendar Year	Number	Annual Benefits	Number	Annual Benefits	Number	Annual Benefits	Average Annual Benefit	Percent Change in Average Benefit
2008	6,000	\$ 94,526,796	3,408	\$23,956,030	88,954	\$ 936,023,977	\$ 10,523	5.0%
2009	6,422	106,361,549	3,318	26,218,141	92,058	1,016,167,385	11,038	4.9
2010	7,518	131,651,729	3,509	28,512,198	96,067	1,119,306,916	11,651	5.6
2011	7,733	130,378,649	5,200	35,101,362	98,600	1,214,584,203	12,318	5.7
2012	7,912	137,928,914	3,736	37,015,540	102,776	1,315,497,577	12,800	3.9
2013	8,855	154,660,608	3,899	39,647,140	107,732	1,430,511,045	13,278	3.7
2014	9,099	142,621,088	4,076	16,601,950	112,755	1,556,530,183	13,805	4.0
2015	9,553	154,096,739	4,276	17,348,199	118,032	1,693,278,723	14,346	3.9
2016	9,387	150,640,326	4,219	16,654,518	123,200	1,827,264,531	14,832	3.4
2017	9,655	160,577,864	4,597	19,935,030	128,258	1,967,907,365	15,343	3.4

#### Schedule of Disabilitants Added to and Removed from Rolls

	Add	ed to Rolls	Remov	ed from Rolls	End o	f Year Rolls		
Calendar Year	Number	Annual Benefits	Number	Annual Benefits	Number	Annual Benefits	Average Annual Benefit	Percent Change in Average Benefit
2008	2,313	\$ 28,754,216	2,422	\$ 29,343,494	1,216	\$ 10,790,892	\$ 8,874	3.3%
2009	2,349	28,136,992	2,325	28,024,488	1,240	10,903,396	8,793	(0.9)
2010	2,407	29,913,347	2,433	29,158,561	1,214	11,658,182	9,603	9.2
2011	2,338	27,038,672	2,468	28,452,864	1,084	10,243,990	9,450	(1.6)
2012	2,207	25,996,458	2,138	25,600,824	1,153	10,639,624	9,228	(2.3)
2013	2,166	26,589,417	2,237	26,682,159	1,082	10,546,882	9,748	5.6
2014	2,123	26,688,760	2,115	26,126,923	1,090	11,108,719	10,191	4.5
2015	1,936	24,777,914	2,036	26,296,672	990	9,589,961	9,687	(4.9)
2016	1,841	24,551,597	1,899	25,084,100	932	9,057,458	9,718	0.3
2017	1,679	23,175,340	1,839	23,943,773	772	8,289,025	10,737	10.5



**TABLE VI**Average Employer Contribution Rates (Last five years)

Calendar Year	Normal Cost	Prior Service Cost	Disability and Death	Supplemental Retirement Benefit	Total					
Regular members	;									
2015	7.51%	3.28%	0.28%	0.62%	11.69%					
2016	6.84	3.98	0.29	0.62	11.73					
2017	6.71	3.74	0.27	0.62	11.34					
2018	6.80	3.63	0.19	0.62	11.24					
2019	5.61	2.66	0.17	0.62	9.06					
Sheriff's Law Enforcement Personnel (SLEP) members										
2015	12.42%	9.00%	0.29%	0.62%	22.33%					
2016	11.95	9.85	0.29	0.62	22.71					
2017	11.77	9.73	0.27	0.62	22.39					
2018	11.63	9.05	0.19	0.62	21.49					
2019	10.98	8.73	0.17	0.62	20.50					
Elected County O	fficial (ECO) membe	rs								
2015	17.73%	51.73%	0.29%	0.62%	70.37%					
2016	16.49	68.67	0.29	0.62	86.07					
2017	16.83	55.78	0.27	0.62	73.50					
2018	16.85	65.03	0.22	0.62	82.72					
2019	13.21	52.41	0.19	0.62	66.43					

**TABLE VII**Participating Member Contribution Rates (Last ten years)

	Ro	Regular IMRF			Sheriff's Law Enforcement Personnel				Elected County Official			
Year	Normal	Survivor	Total	Normal	Survivor	SLEP	Total	Normal	Survivor	ECO	Total	
2008	3.75%	0.75%	4.50%	3.75%	0.75%	3.00%	7.50%	3.75%	0.75%	3.00%	7.50%	
2009	3.75	0.75	4.50	3.75	0.75	3.00	7.50	3.75	0.75	3.00	7.50	
2010	3.75	0.75	4.50	3.75	0.75	3.00	7.50	3.75	0.75	3.00	7.50	
2011	3.75	0.75	4.50	3.75	0.75	3.00	7.50	3.75	0.75	3.00	7.50	
2012	3.75	0.75	4.50	3.75	0.75	3.00	7.50	3.75	0.75	3.00	7.50	
2013	3.75	0.75	4.50	3.75	0.75	3.00	7.50	3.75	0.75	3.00	7.50	
2014	3.75	0.75	4.50	3.75	0.75	3.00	7.50	3.75	0.75	3.00	7.50	
2015	3.75	0.75	4.50	3.75	0.75	3.00	7.50	3.75	0.75	3.00	7.50	
2016	3.75	0.75	4.50	3.75	0.75	3.00	7.50	3.75	0.75	3.00	7.50	
2017	3.75	0.75	4.50	3.75	0.75	3.00	7.50	3.75	0.75	3.00	7.50	



## **ACTUARIAL BALANCE SHEET**

	December 31						
	2017	2016					
Sources of Funds							
Actuarial value of assets	\$ 39,187,802,312	\$ 36,773,397,527					
Actuarial present value of future contributions							
Member	2,549,012,250	2,635,457,204					
Employer Normal Costs	3,148,115,665	3,818,042,923					
Under Funded Actuarial Accrued Liability	2,991,680,344	4,585,312,875					
Total Sources	\$ 47,876,610,571	\$ 47,812,210,529					
Uses of Funds							
Retired members and beneficiaries	\$ 22,007,921,865	\$ 21,085,519,077					
Inactive members	3,580,040,581	3,503,326,675					
Active members	22,091,371,978	23,067,895,901					
Voluntary additional members	163,347,624	122,864,462					
Death and disability benefits	33,928,523	32,604,414					
Total Uses	\$ 47,876,610,571	\$ 47,812,210,529					

## **ANALYSIS OF UNDER FUNDED LIABILITY**

	December 31					
	2017	2016				
Under funded liability beginning of year	\$ 4,585,312,875	\$ 4,573,446,421				
Assumed net (payments) during year	(302,834,136)	(295,381,436)				
Assumed interest (7.5 percent)	332,679,056	332,065,180				
Expected under funded liability	\$ 4,615,157,795	\$ 4,610,130,165				
Decrease due to experience study	(1,094,614,950)	-				
(Decrease)/increase due to investment performance	(475,485,083)	109,908,168				
Decrease due to other sources	(53,377,418)	(134,725,458)				
Under funded liability end of year	\$ 2,991,680,344	\$ 4,585,312,875				



## **DERIVATION OF EXPERIENCE GAIN (LOSS)**

	2017	2016
Type of Risk Area		
Risks Related to Assumptions (in millions)		
Economic Risk Areas		
Investment Return/(Loss)	\$ 475.5	\$ (109.9)
Pay Increases	104.3	312.7
Demographic Risk Areas		
Service Retirements	(21.8)	(20.2)
Early Retirements	(2.6)	(2.6)
Vested Deferred Retirements	(17.8)	(14.1)
Death and Survivor Benefits	(8.2)	(3.3)
Disability Benefits	9.7	12.0
Terminated with Refund	22.4	35.7
Changes due to Experience Study (1)	1,094.6	0.0
Risks Not Related to Assumptions (2)	(32.6)	(185.5)
Total Gain During Year	<b>\$ 1,623.5</b>	\$ 24.8

Regular actuarial valuations give information about the composite change in unfunded actuarial accrued liabilities — whether or not the liabilities are increasing or decreasing and by how much. The objective of a gain and loss analysis is to determine the portion of the change in actuarial condition (unfunded actuarial accrued liabilities) attributable to each risk area. The fact that actual experience differs from assumed experience is to be expected — the future cannot be predicted with 100 percent precision. The economic risk areas (particularly investment return and pay increases) are volatile. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common.

- (1) Reflects the impact of the triennial experience study. The most significant adjustment to the actuarial assumptions was a change in the mortality table.
- (2) This is primarily due to rehires of former employees and actual reserve transfers for retirees being higher than the estimated reserve transfers.



#### SUMMARY OF BENEFITS

This is a brief description of IMRF benefits. Additional conditions and restrictions may apply. A complete description is found in Article 7 of the Illinois Pension Code.

#### **GENERAL**

IMRF serves 2,997 employers including cities, villages, counties, school districts, townships, and various special districts, such as parks, forest preserves, and sanitary districts. Each employer contributes to separate accounts to provide future retirement benefits for its own employees.

Employees of these employers are required to participate if they work in an IMRF qualified position. An IMRF qualified position is one that is expected to equal or exceed the employer's annual hourly standard; the standard is either 600 or 1,000 hours a year.

IMRF has three benefit plans. The vast majority of IMRF members participate in the Regular plan. The Sheriff's Law Enforcement Personnel (SLEP) plan is for sheriffs, deputy sheriffs, and selected police chiefs. Forest preserve districts may adopt the SLEP plan for their law enforcement personnel. Counties could adopt the Elected County Official (ECO) plan for their elected officials prior to August 8, 2011. The ECO plan was closed to new participants after that date. After a county adopted the ECO plan, participation was optional for the elected officials of that county.

All three IMRF benefit plans have two tiers. Tier 2 benefits are lower than Tier 1, and cost about 40% less to provide. All IMRF members initially hired on or after January 1, 2011, are in Tier 2.

Both the member and the employer contribute toward retirement benefits. Members contribute a percentage of their salary as established by the Pension Code. The percentage depends on the plan in which the member participates. Regular members contribute 4.5%. SLEP and ECO members contribute 7.5%. Members also have the option of making voluntary after-tax contributions up to 10% of their salary. Employer contribution rates are actuarially calculated annually for each employer. Employers pay most of the cost for member and survivor pensions and all of the cost for supplemental retirement, death, and disability benefits. All contributions are pooled for investment purposes.

Since 1982, investment returns account for 64% of IMRF revenue.

#### **VESTING**

#### TIER 1

Members are vested for pension benefits when they have at least eight years of qualifying service credit. SLEP members are vested for a SLEP pension when they have at least 20 years of SLEP service credit. SLEP members with more than eight years of service, but less than 20 years of SLEP service, will receive a Regular pension.

Revised ECO members (those who joined the ECO plan after January 25, 2000) are vested with eight or more years of ECO service credit in the same elected county position. Revised ECO members with eight years of service, but less than eight years in the same elected county office, will receive a Regular pension.

#### TIFR 2

Members are vested for pension benefits when they have at least 10 years of qualifying service credit. SLEP members are vested for a SLEP pension when they have at least 10 years of SLEP service credit. ECO members (those who joined the ECO plan after January 1, 2011, and before August 8, 2011) are vested with 10 or more years of total service credit with at least eight years in the same elected county position. ECO members with at least 10 years of total service credit, but less than eight years of service in the same elected county office, will receive a Regular pension.



#### **REFUNDS**

Non-vested members who stop working for an IMRF employer can receive a lump sum refund of their IMRF member contributions. Vested members can receive a lump sum refund of their IMRF member contributions if they stop working for an IMRF employer prior to age 55, or age 62 for Tier 2 members. Vested members age 55 or older (62 or older for Tier 2 members) may receive separation refunds if the member rolls over the refund into another defined benefit retirement plan for the purpose of purchasing service credit.

Members who retire without an eligible spouse (married to or in a civil union with the member at least one year before the member terminates IMRF participation) may receive a refund of their surviving spouse contributions with interest or an annuity.

If, upon a member's death, all of the member contributions with interest were not paid as a refund or pension to either the member or his or her spouse, the beneficiary will receive any balance of the member's account.

#### PENSION CALCULATIONS

#### A REGULAR IMRF PENSION IS:

- 1-2/3% of the final rate of earnings for each of the first 15 years of service credit, plus
- 2% for each year of service credit in excess of 15 years.

The maximum pension at retirement cannot exceed 75% of the final rate of earnings.

#### A SLEP PENSION IS:

• 2-1/2% of the final rate of earnings for each year of service.

The maximum pension at retirement cannot exceed 80% (75% for Tier 2) of the final rate of earnings.

#### AN ECO PENSION IS:

- 3% of the final rate of earnings for each of the first eight years of service, plus
- 4% for each year of service between eight and 12 years of service, plus
- 5% for years of service credit over 12.

The maximum pension at retirement cannot exceed 80% of the final rate of earnings.

A money purchase minimum pension is provided if it exceeds the normal formula amount. The money purchase minimum is the amount that may be purchased by 2.4 times the member's applicable accumulated contributions, including interest thereon.

A reversionary pension option is provided to members at retirement. This option permits the member to revert a portion of his pension to one other person. This election is irrevocable.

An IMRF pension is paid for life.

#### FINAL RATE OF EARNINGS

#### TIFR 1

The final rate of earnings for Regular and SLEP members is the highest total earnings during any 48 consecutive months within the last 10 years of IMRF service, divided by 48, or the total lifetime earnings divided by the total lifetime number of months of service, whichever is higher. The final rate of earnings for ECO members is the annual salary of the ECO member on the day he or she retires. For Revised ECO members, the final rate of earnings is the



highest total earnings during any 48 consecutive months within the last 10 years of IMRF service, divided by 48, for each office held.

#### TIER 2

The final rate of earnings for Regular and SLEP members is the highest total earnings during any 96 consecutive months within the last 10 years of IMRF service, divided by 96, or the total lifetime earnings divided by the total lifetime number of months of service, whichever is higher. For ECO members who joined the plan after January 1, 2011, and before August 8, 2011, the final rate of earnings is the highest total earnings during any 96 consecutive months within the last 10 years of IMRF service, divided by 96, for each office held. Pensionable earnings are initially capped at \$106,800, increases annually by 3% or one-half of the increase of the Consumer Price Index, whichever is less. The pensionable earnings cap for 2017 was \$112,408.42 and for 2018 will be \$113,644.91. For Tier 2 SLEP members, overtime compensation is excluded from pensionable earnings.

#### RETIREMENT ELIGIBILITY

#### TIER 1

Normal retirement for an unreduced pension is:

- Age 60 with eight or more years of service, or 35 or more years of service at age 55,
- Age 50 with 20 or more years of SLEP service for members with SLEP service,
- · Age 55 with eight or more years of service for members with ECO service, or
- Age 55 with eight or more years of service in the same elected county office for members with Revised ECO service.

Regular members may retire as early as age 55 with a reduced pension. The reduction is the lesser of:

- 1/4% for each month the member is under age 60, or
- 1/4% for each month of service less than 35 years.

#### TIFR 2

Normal retirement for an unreduced pension is:

- Age 67 with 10 or more years of service, or 35 or more years of service at age 62,
- Age 55 with 10 or more years of SLEP service for members with SLEP service, or
- Age 67 with eight or more years of service in the same elected county official for members with ECO service (ten years total service).

Regular members may retire as early as age 62 with a reduced pension. The reduction is the lesser of:

- 1/2% for each month the member is under age 67, or
- 1/2% for each month of service less than 35 years.

SLEP members may retire as early as age 50 with a reduced pension. The reduction is 1/2% for each month the member is under age 55.

#### SERVICE CREDIT

Service credit is the total time under IMRF, stated in years and fractions. Service is credited monthly while the member is working, receiving IMRF disability benefits, or on IMRF's Benefit Protection Leave. For revised ECO members, the ECO benefit formula is limited to service in an elected office.

Members may qualify for a maximum of one year of additional service credit for unused, unpaid sick leave accumulated with the last employer. Members who retire from a school district may utilize unused sick leave from all school district



employers. This additional service credit applies only for members leaving employment for retirement. The service credit is earned at the rate of one month for every 20 days of unused, unpaid sick leave or fraction thereof.

IMRF is a participating plan under the Reciprocal Act, as are all other Illinois public pension systems, except local police and fire pension plans. Under the Reciprocal Act, service credit from multiple pension systems of at least one year may be considered together at the date of retirement or death for the purpose of determining eligibility for and amount of benefits.

#### POST-RETIREMENT INCREASES

#### TIFR 1

Members in all plans receive an annual 3% increase based upon the original amount of the pension. The increase for the first year is prorated for the number of months the member was retired.

#### TIER 2

Members in all plans receive an annual increase based upon the original amount of the pension of 3% or one-half of the increase in the Consumer Price Index, whichever is less. For Regular and ECO members, the annual increases do not begin until the retiree reaches the age of 67 or after 12 months of retirement, whichever is later. For SLEP members the increases begin at age 60 or after 12 months of retirement, whichever is later.

### EARLY RETIREMENT INCENTIVE (ERI)

IMRF employers may offer an Early Retirement Incentive (ERI) program to their employees who are over 50 years of age (57 for Tier 2 Regular and ECO members) and have at least 20 years of service credit. Eligible members may purchase up to five years of service credit and age. Employers must pay off the additional ERI liability within 10 years. Subsequent ERI programs may be offered by an employer only after the liability for the previous ERI program is paid. An employer may only offer an ERI program once every five years.

#### SUPPLEMENTAL RETIREMENT BENEFITS

Each July, IMRF provides a supplemental benefit payment, or "13<sup>th</sup> Payment," to IMRF retirees and surviving spouses who have received IMRF pension payments for the preceding 12 months. The supplemental benefit payment amount will vary depending on the dollar amount to be distributed and the number of persons eligible. The supplemental benefit payment amount is decreasing annually because the number of retirees is increasing while the pool of available money is decreasing.

#### **DISABILITY BENEFITS**

Regular and SLEP members are eligible for a maximum of 30 months of temporary disability benefits if they:

- Have at least 12 consecutive months of service credit since being enrolled in IMRF,
- Have at least nine months of service credit in the 12 months immediately prior to becoming disabled,
- Are unable to perform the duties of any position which might reasonably be assigned by the IMRF employer because of any illness, injury, or other physical or mental condition, and
- Are not receiving any earnings from any IMRF employer.

Regular and SLEP members are eligible for total and permanent disability benefits until they become eligible for full Social Security Old Age benefits if they:

- · Have exhausted their temporary disability benefits,
- Have a medical condition which did not pre-exist their IMRF participation or they have five years of IMRF participation without being on temporary disability, and
- Are unable to work in any gainful activity for any employer.



The monthly disability benefit payment is equal to 50% of the average monthly earnings based on the 12 months prior to the month the member became disabled.

ECO members are eligible for ECO disability benefits if they:

- Have at least 12 consecutive months of service credit since being enrolled in IMRF,
- Are in an elected county office at the time the disability occurred,
- Are making ECO contributions at the time the disability occurred,
- Are unable to reasonably perform the duties of their offices,
- · Have resigned their offices, and
- Have two licensed physicians, approved by IMRF, certify that the ECO member is permanently disabled.

The monthly ECO disability benefit is equal to the greater of:

- 50% of the annualized salary payable on the last day of ECO participation divided by 12 or,
- The retirement benefit earned to date.

Disability benefits under all plans are offset by Social Security or workers' compensation benefits. If disabled members receive Social Security disability and/or workers' compensation benefits, IMRF pays the difference between those benefits and 50% of the member's average monthly earnings. However, IMRF will always pay a minimum monthly benefit of \$10. Members on disability earn pension service credit as if they were working.

#### **DEATH BENEFITS**

Beneficiaries of active members who have more than one year of service, or whose deaths are job-related, are entitled to lump sum IMRF death benefits. If the member was not vested, or vested without an eligible spouse, the death benefit is equal to one year's earnings (limited to pensionable earnings cap for Tier 2 members) plus any balance in the member's account. Eligible spouses of deceased, vested, active members may choose the lump sum or a monthly surviving spouse pension.

Beneficiaries of inactive, non-vested members receive a lump sum payment of any balance in the member's account, including interest. If the beneficiary is an eligible spouse of an inactive, vested member age 55 or older, the spouse may choose between the lump sum payment or a death benefit of \$3,000, plus a monthly surviving spouse pension. Beneficiaries of retired members receive a \$3,000 death benefit. Eligible spouses also receive a surviving spouse pension.

#### SURVIVING SPOUSE PENSION

For Regular and SLEP members, a surviving spouse's monthly pension is one-half (66-2/3% for Tier 2) of the member's pension.

For ECO members, a surviving spouse's monthly pension is 66-2/3% of the member's pension. This pension is payable once the surviving spouse becomes 50 years old. If the spouse is caring for the member's minor, unmarried children (the age 50 requirement does not apply), the spouse will receive:

- A monthly pension equal to 30% of the ECO member's salary at time of death, plus
- 10% of the ECO member's salary at time of death for each minor, unmarried child. The maximum total monthly benefit payable to spouse and children cannot exceed 50% of the ECO member's salary at the time of death, or
- A monthly pension equal to 66-2/3% of the pension the member earned.

Surviving spouse pensions under all plans are increased each January 1. The increase is based on the original amount of the pension. The increase for the first year is prorated for the number of months the surviving spouse or the member received a pension. For Tier 1, the annual increase is three percent. For Tier 2, the annual increase is 3% or one-half the increase in the Consumer Price Index, whichever is less.



# CONFIDENCE

**Confidence.** As a trusted partner in retirement services, IMRF knows the important part it plays in thousands of people's lives on a daily basis.

IMRF continues to demonstrate excellence in processes, finances, and investments—all so that our members can feel confident in their financial security. Through our vision to provide the highest quality retirement services, our members, their beneficiaries, and employers can be assured that IMRF will keep their retirement safe.



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## **TABLE VIII**

Changes in Fiduciary Net Position (Last ten years)

	Additions										
		Employer	Contributions								
Calendar Year	Investment Earnings Net of Direct Investment Expense	Dollars	Percent of Annual Covered Payroll	Member Contributions	Other	Total Additions					
2008	\$(6,096,480,733)	\$631,147,476	10.08%	\$ 314,019,939	\$ 18,722	\$ (5,151,294,596)					
2009	4,423,550,741	660,399,408	10.22	324,070,795	9,148	5,408,030,092					
2010	2,976,549,317	770,142,278	12.05	324,901,985	7,032	4,071,600,612					
2011	(92,930,304)	800,804,253	12.45	327,680,889	9,852	1,035,564,690					
2012	3,393,689,073	883,216,281	13.60	330,814,542	12,037	4,607,731,933					
2013	5,583,120,005	930,969,056	14.10	338,934,421	8,455	6,853,031,937					
2014	2,001,420,871	923,382,825	13.72	351,089,445	19,157	3,275,912,298					
2015	200,727,209	900,476,884	13.01	368,005,271	464,050	1,469,673,414					
2016	2,664,864,774	933,937,321	13.33	380,385,015	12,340	3,979,199,450					
2017	5,718,221,626	903,482,031	12.68	393,747,860	13,200	7,015,464,717					
		Deductio	ns								
Calendar Year	Benefits	Refunds	Administrative Expenses	Total Deductions		Change in Fiduciary Net Position					
2008	\$ 997,492,141	\$ 31,926,120	\$ 20,727,536	\$ 1,050,145,797		\$(6,201,440,393)					
2009	1,077,852,453	27,426,079	21,967,308	1,127,245,840		4,280,784,252					
2010	1,178,030,534	32,201,577	22,318,493	1,232,550,604		2,839,050,008					
2011	1,284,405,609	32,900,105	23,086,712	1,340,392,426		(304,827,736)					
2012	1,389,815,471	34,142,193	24,508,053	1,448,465,717		3,159,266,216					
2013	1,503,374,148	36,944,214	25,463,299	1,565,781,661		5,287,250,276					
2014	1,626,821,250	39,191,090	26,431,652	1,692,443,992		1,583,468,306					
2015	1,758,184,358	36,748,509	28,707,981	1,823,640,848		(353,967,434)					
2016	1,902,139,899	37,690,098	37,550,066	1,977,380,063		2,001,819,388					
2017	2,043,613,657	42,552,060	31,031,320	2,117,197,037		4,898,267,680					



## **TABLE IX**

## Benefit Expense by Type (Last ten years)

	Death										
Calendar Year	Supplemental	Refund	Burial	Residual							
2008	\$ 10,416,827	\$ 7,971,900	\$ 7,334,749	\$ 765,241							
2009	8,486,871	9,096,938	7,813,566	961,645							
2010	10,313,306	8,547,634	7,726,161	1,439,264							
2011	9,664,027	9,184,487	8,435,071	1,328,589							
2012	10,377,472	9,641,181	8,103,523	1,711,659							
2013	9,681,776	9,155,295	8,369,090	1,850,712							
2014	8,159,700	9,697,949	8,941,815	1,785,250							
2015	7,115,125	9,142,480	9,578,310	1,935,771							
2016	9,066,318	9,154,917	9,350,020	2,199,715							
2017	7,632,879	9,128,002	9,832,334	2,077,934							

Disability										
Permanent	Temporary									
\$ 4,113,550	\$ 7,195,656									
4,211,002	6,649,144									
4,286,549	7,205,576									
4,157,671	7,471,493									
3,878,005	7,012,081									
3,949,374	7,265,126									
3,688,052	7,214,455									
3,526,820	6,267,477									
3,480,432	6,227,065									
3,058,374	6,393,159									

		Annui	Refu	ınds			
Calendar Year	Retirement	Surviving Spouse	Beneficiary	Supplemental	Separation	Other	Total
2008	\$ 861,528,538	\$ 57,647,849	\$ 1,581,010	\$ 38,936,821	\$ 28,287,188	\$ 3,638,932	\$1,029,418,261
2009	936,104,649	61,615,626	1,751,952	41,161,060	25,974,794	1,451,285	1,105,278,532
2010	1,027,761,178	66,174,661	1,962,756	42,613,449	30,440,247	1,761,330	1,210,232,111
2011	1,130,473,927	71,188,507	2,208,709	40,293,128	31,515,077	1,385,028	1,317,305,714
2012	1,229,614,161	76,545,359	2,455,082	40,476,948	31,482,985	2,659,208	1,423,957,664
2013	1,337,638,438	81,839,499	2,669,383	40,955,455	33,987,457	2,956,757	1,540,318,362
2014	1,453,666,782	88,033,643	2,944,873	42,688,732	35,250,093	3,940,997	1,666,012,340
2015	1,580,255,793	93,884,986	3,233,682	43,243,914	32,618,840	4,129,669	1,794,932,867
2016	1,713,504,074	100,899,288	3,539,931	44,718,138	30,955,185	6,734,913	1,939,829,996
2017	1,849,014,473	108,313,203	3,831,348	44,331,951	33,412,072	9,139,988	2,086,165,717

**TABLE X**Net Cash Flow from Contributions After Benefits (Last ten years)

Year	Employer Contributions	Member Contributions	Total Contributions	Total Benefit Payments	Net Cash Flow
2008	\$ 631,147,476	\$ 314,019,939	\$ 945,167,415	\$ 1,029,418,261	\$ (84,250,846)
2009	660,399,408	324,070,795	984,470,203	1,105,278,532	(120,808,329)
2010	770,142,278	324,901,985	1,095,044,263	1,210,232,111	(115,187,848)
2011	800,804,253	327,680,889	1,128,485,142	1,317,305,714	(188,820,572)
2012	883,216,281	330,814,542	1,214,030,823	1,423,957,664	(209,926,841)
2013	930,969,056	338,934,421	1,269,903,477	1,540,318,362	(270,414,885)
2014	923,382,825	351,089,445	1,274,472,270	1,626,821,250	(352,348,980)
2015	900,476,884	368,005,271	1,268,482,155	1,794,932,867	(526,450,712)
2016	933,937,321	380,385,015	1,314,322,336	1,939,829,996	(625,507,660)
2017	903,482,031	393,474,860	1,297,229,891	2,086,165,717	(788,935,826)

**TABLE XI**Operating Statistics - Number of Initial Benefit Payments (Last ten years)

Calendar Year	Annuity	Disability	Death	Refund	Total
2008	5,081	2,313	3,033	10,469	20,896
2009	5,467	2,349	3,149	10,593	21,558
2010	6,541	2,407	3,141	10,219	22,308
2011	6,751	2,338	3,308	10,001	22,398
2012	6,845	2,207	3,288	9,864	22,204
2013	7,791	2,166	3,228	10,530	23,715
2014	7,959	2,123	3,413	11,139	24,634
2015	8,347	1,936	3,644	10,571	24,498
2016	8,222	1,841	3,599	10,125	23,787
2017	8,372	1,679	3,680	10,775	24,506



## **TABLE XII**

Number of Employees (Last ten years)

	Adminis	tration	Audit	Resources Finance		lent <sup>s</sup>	N.	nications Member	Services	atio	program	genent Office S	ervices
Calendar Year	Admini	Interna	Human	Finance	Investif	Legal	Commit	Membe	Benefits	Informatio	Prograna	office 3	Total
2008	4	1	4	30	11	4	6	25	27	42	-	22	176
2009	4	1	4	31	11	4	6	26	26	41	-	22	176
2010	4	1	4	30	11	4	6	26	27	39	-	22	174
2011	4	4	4	27	10	4	7	26	28	34	6	22	176
2012	4	4	4	28	9	4	7	28	28	34	4	22	176
2013	4	7	3	29	10	4	6	30	28	35	5	21	182
2014	4	7	4	27	13	5	7	33	28	33	5	19	185
2015	4	7	4	27	13	5	9	35	31	34	6	19	194
2016	5	8	4	20	14	5	9	37	31	32	6	19	190
2017	6	8	4	25	14	5	8	38	35	40	0*	19	202

<sup>\*</sup>The Program Management Office merged with Information Systems

## **TABLE XIII**

Number of Actively Participating Employers (Last ten years)

Calendar Year End	Cities	Villages	Counties	School Districts	Townships	Other	Total
2008	256	406	101	864	474	839	2,940
2009	256	407	101	865	477	844	2,950
2010	257	410	101	864	477	854	2,963
2011	257	411	101	862	479	854	2,964
2012	258	411	101	859	479	861	2,969
2013	258	413	101	858	480	867	2,977
2014	258	414	101	855	478	870	2,976
2015	259	415	101	850	478	869	2,972
2016	259	417	101	851	488	871	2,987
2017	259	419	101	850	478	890	2,997

**TABLE XIV** 

Principal Participating Employers (Current year and ten years ago)

		2017			2008	
Employer	Active Members	Rank	Percentage of Total Active Members	Active Members	Rank	Percentage of Total Active Members
DuPage County	3,039	1	1.73%	3,100	1	1.71%
Will County	2,632	2	1.50	2,313	3	1.27
Lake County	2,566	3	1.46	2,917	2	1.61
Union School District 46	2,219	4	1.26	1,948	4	1.07
Rockford School District 205	1,653	5	0.94	1,587	6	0.87
Winnebago County	1,557	6	0.89	1,918	5	1.06
Kane County	1,384	7	0.79	1,394	7	0.77
Palatine School District 211	1,368	8	0.78	N/A*	N/A*	N/A*
McHenry County	1,287	9	0.73	1,294	10	0.71
Peoria School District 150	1,285	10	0.73	N/A*	N/A*	N/A*
Plainfield School District 202	N/A**	N/A**	N/A**	1,343	8	0.74
City of Springfield	N/A**	N/A**	N/A**	1,321	9	0.73

<sup>\*</sup>In 2008, this entity did not rank in the Top Ten.

**TABLE XV** 

Number of Actively Participating Members (Last ten years)

Calendar Year End	Male Participants	Female Participants	Total
2008	66,802	114,876	181,678
2009	66,640	114,740	181,380
2010	65,543	111,160	176,703
2011	65,332	110,512	175,844
2012	64,918	109,853	174,771
2013	64,889	108,936	173,825
2014	65,029	108,939	173,968
2015	65,104	108,994	174,098
2016	65,379	109,640	175,019
2017	65,085	110,480	175,565

<sup>\*\*</sup> In 2017, this entity did not rank in the Top Ten.



## TABLE XVI

Participating Members' Length of Service (Last ten years)

Calendar Year	Total Active Members	Under 1 Year	1 to 7 Years	8 to 14 Years	15 Years and Over	Percent Vested
2008	181,678	19,543	76,607	44,487	41,041	47.1%
2009	181,380	14,950	77,606	46,749	42,075	49.0
2010	176,703	12,928	73,980	46,906	42,889	50.8
2011	175,844	15,158	70,518	46,459	43,709	51.3
2012	174,771	15,994	67,735	45,777	45,265	52.1
2013	173,825	16,990	65,389	45,062	46,384	52.6
2014	173,968	18,391	63,714	44,256	47,607	52.8
2015	174,098	18,515	63,413	43,470	48,700	52.9
2016	175,019	18,732	64,487	57,727	34,073	52.5
2017	175,565	19,347	67,173	39,978	49,067	50.7

## **TABLE XVII**

Active Members by Age

	All Plans		Sheriff's	Sheriff's Law Enforcement Personnel			Elected County Official		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
Under 20	224	248	472	-	-	-	-	-	-
20 to 29	8,351	10,733	19,084	459	72	531	-	-	-
30 to 39	12,886	17,558	30,444	1,137	178	1,315	5	-	5
40 to 49	14,173	26,245	40,418	1,308	207	1,515	13	7	20
50 to 54	8,706	17,764	26,470	353	54	407	22	10	32
55 to 59	9,178	18,844	28,022	168	43	211	20	12	32
60 to 69	9,882	17,394	27,276	130	18	148	33	16	49
70 and Over	1,685	1,694	3,379	7	-	7	2	1	3
Total	65,085	110,480	175,565	3,562	572	4,134	95	46	141

## **TABLE XVIII**

Annuitants by Age

	Retirees			Sui	viving Spou	Beneficiaries			
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
Under 55	307	74	381	17	107	124	104	156	260
55 to 59	3,386	5,567	8,953	38	280	318	20	74	94
60 to 64	7,089	13,138	20,227	137	484	621	31	64	95
65 to 69	9,021	18,349	27,370	340	834	1,174	15	63	78
70 to 74	6,964	15,047	22,011	509	1,208	1,717	21	56	77
75 to 79	4,827	10,374	15,201	695	1,552	2,247	7	39	46
80 to 84	3,194	6,944	10,138	774	1,752	2,526	8	30	38
85 to 89	1,743	4,591	6,334	744	1,641	2,385	2	17	19
90 to 94	751	2,236	2,987	413	985	1,398	2	8	10
95 to 99	155	655	810	114	337	451	1	2	3
100 and over	14	91	105	14	52	66	-	-	-
Total	37,451	77,066	114,517	3,795	9,232	13,027	211	509	720

## **TABLE XIX**

Average Initial Benefit Payment Amounts (Last ten years)

	Single Sum	Payments	Recurring Payments		
Calendar Year	Separation Refunds	Lump Sum Death Benefit	Annual Disability (1)	Annual Retirement (2)	
2008	\$ 2,758	\$ 29,352	\$ 17,238	\$ 15,219	
2009	2,459	28,763	17,359	16,200	
2010	2,987	30,817	17,830	17,014	
2011(3)	3,154	30,592	17,958	16,490	
2012(3)	3,218	34,500	18,475	15,718	
2013(3)	3,229	34,853	18,898	15,781	
2014(3)	3,164	35,795	20,048	16,877	
2015(3)	3,127	35,141	19,696	17,301	
2016(3)	3,075	32,018	20,386	17,128	
2017(3)	3,119	34,645	20,632	17,878	

<sup>(1)</sup> Prior to Social Security and workers' compensation offsets.

 $<sup>{\</sup>it (2) Includes voluntary additional benefits.}$ 

<sup>(3)</sup> Includes Tier 1 and Tier 2.



**TABLE XX**Analysis of Initial Retirement Benefits: Regular Plan (Last ten years)

			Y	ears of Cre	dited Servic	ce		
	8-9	10-14	15-19	20-24	25-29	30-34	35+	Total
2008								
Avg Monthly Annuity	\$ 312	\$ 494	\$ 852	\$1,230	\$1,730	\$2,671	\$3,730	\$1,248
Avg Monthly FRE	\$2,229	\$2,498	\$2,974	\$3,229	\$3,597	\$4,645	\$5,358	\$3,212
Number of Retirees	538	790	685	657	472	318	283	3,743
2009			•	•	•			
Avg Monthly Annuity	\$ 317	\$ 509	\$ 891	\$1,364	\$1,951	\$2,549	\$3,712	\$1,389
Avg Monthly FRE	\$2,253	\$2,565	\$3,052	\$3,553	\$4,049	\$4,419	\$5,305	\$3,413
Number of Retirees	551	804	682	717	497	444	371	4,066
2010	•		•	•	•			
Avg Monthly Annuity	\$ 340	\$ 513	\$ 895	\$1,410	\$1,935	\$2,598	\$3,703	\$1,421
Avg Monthly FRE	\$2,401	\$2,583	\$3,100	\$3,686	\$4,022	\$4,514	\$5,295	\$3,486
Number of Retirees	601	1,029	767	826	645	524	459	4,851
2011								
Avg Monthly Annuity	\$ 339	\$ 543	\$ 906	\$1,352	\$1,929	\$2,731	\$3,879	\$1,437
Avg Monthly FRE	\$2,401	\$2,764	\$3,163	\$3,499	\$4,044	\$4,711	\$5,529	\$3,542
Number of Retirees	578	1,056	792	834	641	553	426	4,880
2012								
Avg Monthly Annuity	\$ 345	\$ 539	\$ 848	\$1,407	\$1,961	\$2,807	\$3,780	\$1,391
Avg Monthly FRE	\$2,473	\$2,758	\$2,946	\$3,670	\$4,083	\$4,808	\$5,436	\$3,503
Number of Retirees	576	1,096	895	774	636	493	398	4,868
2013								
Avg Monthly Annuity	\$ 345	\$ 560	\$ 886	\$1,425	\$1,968	\$2,812	\$3,875	\$1,378
Avg Monthly FRE	\$2,445	\$2,798	\$3,087	\$3,673	\$4,109	\$4,836	\$5,555	\$3,518
Number of Retirees	723	1,312	1,080	943	770	491	461	5,780
2014								
Avg Monthly Annuity	\$ 361	\$ 562	\$ 930	\$1,374	\$2,020	\$2,876	\$3,960	\$1,439
Avg Monthly FRE	\$2,559	\$2,782	\$3,244	\$3,573	\$4,196	\$4,947	\$5,679	\$3,608
Number of Retirees	687	1,251	1,206	984	808	455	551	5,942
2015								
Avg Monthly Annuity	\$ 358	\$ 568	\$ 949	\$1,429	\$2,092	\$2,873	\$4,029	\$1,479
Avg Monthly FRE	\$2,549	\$2,826	\$3,311	\$3,726	\$4,347	\$4,968	\$5,756	\$3,690
Number of Retirees	792	1,310	1,241	983	818	515	615	6,274
2016								
Avg Monthly Annuity	\$ 367	\$ 571	\$ 934	\$1,438	\$2,135	\$2,898	\$4,224	\$1,470
Avg Monthly FRE	\$2,600	\$2,865	\$3,264	\$3,738	\$4,448	\$5,027	\$6,000	\$3,708
Number of Retirees	786	1,252	1,323	974	793	490	547	6,165
2017								
Avg Monthly Annuity	\$ 374	\$ 569	\$ 965	\$1,495	\$2,186	\$3,059	\$4,161	\$1,548
Avg Monthly FRE	\$2,661	\$2,868	\$3,341	\$3,887	\$4,522	\$5,301	\$5,879	\$3,825
Number of Retirees	694	1,243	1,345	1,143	823	549	580	6,377

FRE = Final Rate of Earnings used to calculate retirement benefit.

Note: This schedule excludes members retiring with money purchase benefits, reciprocal benefits, or multiple plans.

**TABLE XXI** 

Analysis of Initial Retirement Benefits: Sheriff's Law Enforcement Personnel (SLEP) Plan (Last ten years)

	Years of Credited Service								
	20-24	25-29	30-34	35+	Total				
2008									
Avg Monthly Annuity	\$3,093	\$5,144	\$4,950	\$4,283	\$4,239				
Avg Monthly FRE	\$5,988	\$7,495	\$6,326	\$5,354	\$6,516				
Number of Retirees	25	19	16	2	62				
2009									
Avg Monthly Annuity	\$3,358	\$4,419	\$5,503	\$4,967	\$4,454				
Avg Monthly FRE	\$6,613	\$6,569	\$7,286	\$6,209	\$6,837				
Number of Retirees	21	17	22	1	61				
2010									
Avg Monthly Annuity	\$2,974	\$4,598	\$5,500	\$4,455	\$4,347				
Avg Monthly FRE	\$5,620	\$6,996	\$7,348	\$5,750	\$6,636				
Number of Retirees	30	43	26	4	103				
2011									
Avg Monthly Annuity	\$3,682	\$4,624	\$5,479	\$5,015	\$4,465				
Avg Monthly FRE	\$6,833	\$6,868	\$7,070	\$6,269	\$6,887				
Number of Retirees	36	36	21	2	95				
2012									
Avg Monthly Annuity	\$3,085	\$4,382	\$4,844	\$3,809	\$3,752				
Avg Monthly FRE	\$6,024	\$7,000	\$6,363	\$5,312	\$6,340				
Number of Retirees	38	21	11	2	72				
2013					,				
Avg Monthly Annuity	\$3,372	\$4,639	\$4,418	\$5,497	\$4,130				
Avg Monthly FRE	\$6,181	\$7,101	\$6,026	\$6,871	\$6,547				
Number of Retirees	31	27	10	5	73				
2014		,	,	,	,				
Avg Monthly Annuity	\$3,439	\$5,142	\$5,220	\$5,868	\$4,547				
Avg Monthly FRE	\$6,430	\$7,631	\$6,706	\$7,448	\$6,998				
Number of Retirees	39	39	18	6	102				
2015		;		:	r				
Avg Monthly Annuity	\$3,508	\$5,179	\$5,511	\$7,123	\$4,690				
Avg Monthly FRE	\$6,642	\$7,685	\$7,480	\$8,904	\$7,316				
Number of Retirees	39	59	18	1	117				
2016	,	,	,		,				
Avg Monthly Annuity	\$3,613	\$5,241	\$6,012	\$2,567	\$4,825				
Avg Monthly FRE	\$6,964	\$7,692	\$7,859	\$3,209	\$7,448				
Number of Retirees	38	59	20	1	118				
2017		-		!					
Avg Monthly Annuity	\$3,796	\$5,580	\$6,389	\$ -	\$5,116				
Avg Monthly FRE	\$7,328	\$8,084	\$8,436	\$ -	\$7,889				
Number of Retirees	39	59	19	-	117				

FRE = Final Rate of Earnings used to calculate retirement benefit.

Note: This schedule excludes members retiring with money purchase benefits, reciprocal benefits, or multiple plans.



## **TABLE XXII**

Analysis of Initial Retirement Benefits: Elected County Official (ECO) Plan (Last ten years)

	Years of Credited Service								
	8-9	10-14	15-19	20-24	25-29	30-34	35+	Total	
2008									
Avg Monthly Annuity	\$ 287	\$1,550	\$4,249	\$4,341	\$ 664	-	-	\$2,506	
Avg Monthly FRE	\$1,184	\$3,773	\$6,094	\$5,425	\$ 830	-	-	\$4,024	
Number of Retirees	3	10	3	8	2	-	-	26	
2009									
Avg Monthly Annuity	\$1,489	\$1,987	\$2,804	\$2,523	-	-	-	\$2,241	
Avg Monthly FRE	\$5,958	\$4,358	\$4,511	\$3,154	-	-	-	\$4,247	
Number of Retirees	1	7	3	3	-	-	-	14	
2010									
Avg Monthly Annuity	\$ 123	\$1,871	\$2,243	\$4,672	\$4,039	\$4,992	\$3,872	\$2,751	
Avg Monthly FRE	\$ 497	\$4,411	\$3,472	\$5,859	\$5,172	\$6,241	\$4,841	\$4,097	
Number of Retirees	4	6	9	5	4	2	1	31	
2011									
Avg Monthly Annuity	\$ 141	\$ 320	\$2,787	\$4,394	\$4,722	-	-	\$2,279	
Avg Monthly FRE	\$ 80	\$ 754	\$4,182	\$5,493	\$6,139	-	-	\$3,234	
Number of Retirees	2	2	3	2	1	-	-	10	
2012									
Avg Monthly Annuity	\$ 687	\$ 845	\$ 762	\$4,046	-	\$4,598	-	\$1,990	
Avg Monthly FRE	\$2,312	\$1,934	\$1,186	\$5,058	-	\$5,748	-	\$2,967	
Number of Retirees	2	9	5	8	-	1	-	25	
2013									
Avg Monthly Annuity	\$ 992	\$1,070	-	\$3,590	-	-	-	\$2,304	
Avg Monthly FRE	\$3,958	\$2,144	-	\$4,487	-	-	-	\$3,920	
Number of Retirees	4	2	-	6	-	-	-	12	
2014									
Avg Monthly Annuity	-	\$ 840	\$ 553	\$2,204	\$ 891	\$ 330	\$3,877	\$ 647	
Avg Monthly FRE	-	\$1,940	\$ 779	\$2,756	\$1,136	\$ 413	\$4,846	\$ 844	
Number of Retirees	-	3	7	6	5	1	2	24	
2015									
Avg Monthly Annuity	-	\$1,204	-	-	-	-	-	\$1,204	
Avg Monthly FRE	-	\$2,988	-	-	-	-	-	\$2,988	
Number of Retirees	-	2	-	-	-	-	-	2	
2016									
Avg Monthly Annuity	-	\$ 990	\$3,088	\$4,568	\$4,725	\$ 966	-	\$3,126	
Avg Monthly FRE	-	\$2,170	\$5,537	\$5,711	\$5,907	\$1,207	-	\$4,378	
Number of Retirees	_	6	2	6	4	1	-	19	
2017									
Avg Monthly Annuity	\$ 481	\$ 405	\$2,323	\$1,104	-	-	-	\$1,432	
Avg Monthly FRE	\$1,953	\$ 854	\$3,403	\$1,380	-	-	-	\$2,175	
Number of Retirees	1	3	6	4	-	-	-	14	

 $FRE = Final\ Rate\ of\ Earnings\ used\ to\ calculate\ retirement\ benefit.$ 

Note: This schedule excludes members retiring with money purchase benefits, reciprocal benefits, or multiple plans.

**TABLE XXIII**Distribution of Current Annuitants by Pension Amount

	Retirement Number of		Surv Numb	vivor per of	All Annuities Number of		
Monthly Pension Amount	Males	Females	Males	Females	Males	Females	
Under \$100	862	4,565	552	634	1,414	5,199	
\$100 to under \$250	2,076	10,502	1,086	1,701	3,162	12,203	
\$250 to under \$500	4,189	16,216	1,150	2,439	5,339	18,655	
\$500 to under \$750	3,907	11,463	612	1,533	4,519	12,996	
\$750 to under \$1,000	3,216	8,047	289	1,007	3,505	9,054	
\$1,000 to under \$2,000	8,425	16,534	281	1,796	8,706	18,330	
\$2,000 to under \$3,000	5,351	5,931	27	442	5,378	6,373	
\$3,000 to under \$4,000	3,593	2,222	7	129	3,600	2,351	
\$4,000 to under \$5,000	2,338	916	2	39	2,340	955	
\$5,000 to under \$6,000	1,486	362	-	12	1,486	374	
\$6,000 and over	2,008	308	-	9	2,008	317	
Total	37,451	77,066	4,006	9,741	41,457	86,807	

Note: Counts do not include disabilities.

#### **2017-2019 STRATEGIC OBJECTIVES**

IMRF's Strategic Plan for 2017-2019 includes four Key Result Areas that address internal and external strategic advantages, challenges, and opportunities. The Strategic Plan not only highlights the four Strategic Objectives, it also provides an overview of the key strategies designed to support the objectives.



2017-2019

## STRATEGIC PLAN

Key Result Area

### Financial Health

To achieve and maintain a funding level that sustains the Plan

Ol<sub>rategic</sub> Object

- Achieving stable/ declining employer contribution rates
- Achieving top decile funding level on a market-value basis relative to a universe of public pension funds
- Achieving progress toward 100% funding
- Achieving or exceeding a 7.5% annual return over the long term
- Outperforming the total portfolio benchmark

Ley Result Area

## Customer Engagement

To foster and maintain engaged members and employers

Otrategic Objective

- Achieving 90%
   "Very Likely to Promote"
   rating on member
   engagement survey
- Achieving 90%
   "Very Likely to Promote" rating on employer engagement survey

el Result Ara

## Workforce Engagement

To foster and maintain an engaged workforce

Strategic Objectiv

- Achieving top decile ranking on the Employee Engagement Survey
- Achieving employee turnover levels below averages as measured by CompData Surveys

cey Result Ara

## Operational Excellence

To provide world class customer service at a reasonable cost

Ofrategic Objective

- Achieving top decile "Overall Service Score" ranking for the CEM Benchmarking Survey
- Achieving top decile
   "American Customer
   Satisfaction Index" ranking
   for the Cobalt Retirement
   Fund Benchmarking Survey
- Achieving 90% "Overall Satisfaction" ratings on member and employer "Voice of the Customer" surveys
- Achieving per-member-cost at or below the median of the CEM administrative cost measure

IMRF will continue to develop and implement Strategic Plans to periodically reassess the best direction to take in fulfilling its promise of world-class service to our members, employers, and stakeholders.





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