

ANNUAL COMPREHENSIVE FINANCIAL REPORT

FOR THE YEARS ENDED DECEMBER 31, 2020 & DECEMBER 31, 2019



FOR THE YEARS ENDED DECEMBER 31, 2020 & DECEMBER 31, 2019

PREPARED BY

The Finance Department of the Illinois Municipal Retirement Fund

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> **Brian Collins** *Executive Director*



IMRF NAVIGATES COVID-19 PANDEMIC

IMRF is secure, agile, and proactive.

IMRF wants all stakeholders to know that the organization successfully met the challenges posed by the COVID-19 pandemic.

WORKFORCE

IMRE seamlessly pivoted from an in-person business environment to one in which staff primarily worked remotely. As of April 2021, team members split their time between working in-person and remotely.

OPERATIONS

IMRF successfully delivered all key services to members and employers. IMRF delivered all promised benefits in full and on time.

INVESTMENTS

WEB-CENTRIC

IMRF fully recovered from the economic disruption caused by the pandemic. Assets grew from a low of \$38.2 billion in March 2020 to \$50.3 billion on December 31, 2020.

IMRF APPRECIATES YOUR FLEXIBILITY

We know that this remains a period of uncertainty for all IMRF stakeholders. IMRF appreciates your flexibility as we adapt to new challenges posed by the pandemic. Please be assured IMRF will continue to deliver all critical services, including its commitments to current and future IMRF retirees. **You can count on us.**

IMRF'S COMMITMENT TO THE FUTURE

During 2020, IMRF began a planned, incremental transition toward becoming a more web-centric organization. This means that starting last year, IMRF relied more on the web and less on paper to provide customer service to its membership.

With this initiative, IMRF aims to:

- Help more members utilize online Member Access to communicate and do business with IMRF.
- Utilize digital platforms to provide better customer service.
- Become a better steward of our global environment by consuming less paper.
- Save money on printing and mailing costs, benefiting all IMRF stakeholders.

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.

These values guide IMRF to REAACH for our mission, and achieve our goals

IMRF VALUES





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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 subject to term limits.



GWEN HENRY 2021 PRESIDENT EXECUTIVE TRUSTEE Current term ending Dec. 31, 2025 DuPage County



SUE STANISH 2021 SECRETARY EXECUTIVE TRUSTEE Current term ending Dec. 31, 2023 Naperville Park District



TOM KUEHNE EXECUTIVE TRUSTEE Current term ending Dec. 31, 2022 Village of Arlington Heights



DAVID MILLER EXECUTIVE TRUSTEE Current term ending Dec. 31, 2021 North Shore Water Reclamation District





Dawes School in Evanston











LOUIS KOSIBA ANNUITANT TRUSTEE Current term ending Dec. 31, 2025 Formerly IMRF

IMRF DIRECTORS



BRIAN COLLINS Executive Director



CARA BANNON Director of Human Resources



BETH JANICKI CLARK General Counsel



DAWN SEPUTIS Customer Service Director



KEYLA VIVAS Chief Information Services Officer

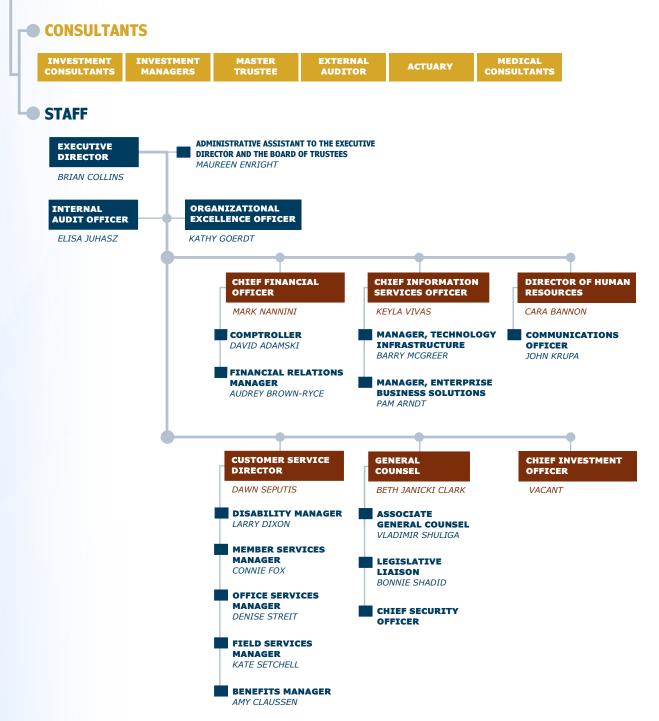


MARK NANNINI Chief Financial Officer

The Chief Investment Officer position is vacant as of December 31, 2020.

ORGANIZATION CHART

BOARD OF TRUSTEES



Consultants – Investment Consultants are listed on pages 68 and 69, investment commissions and fees are listed on pages 78 through 80.

- Actuary Gabriel, Roeder, Smith & Company Brian B. Murphy, F.S.A. Mark Buis, F.S.A. Southfield, Michigan
- External Auditors Plante Moran Michelle Watterworth Theresa Banka Southfield, Michigan
- Master Trustee The Northern Trust Kimberly Miller Senior Vice President Chicago, Illinois

Medical ConsultantsAdjudicatorsMarianjoy Medical GroupOttosen Britz Kelly GilbertWheaton, Illinois& Dinolfo, LTDNorthwest Psychiatric, S.C.Susan Davis Brunner, LLCBuffalo Grove, Illinois

GFOA AWARDS

IMRF takes great pride in its reputation for transparency. To ensure this reputation continues, IMRF seeks feedback from the Government Finance Officers Association (GFOA) through its various award programs.

For 2019, IMRF received the Certificate of Achievement for Excellence in Financial Reporting for the 40th consecutive year. To achieve the award, IMRF earned outstanding or proficient ratings across all award criteria. This honor showcases IMRF's ongoing commitment to the core values of accuracy and accountability, and to providing the resources required to support members and employers across Illinois.

IMRF will continue to participate in the GFOA awards programs in the future.

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NP NP
Government Finance Officers Association
Certificate of
Achievement
for Excellence
in Financial
Reporting
Presented to
Illinois Municipal Retirement Fund
For its Comprehensive Annual Financial Report for the Fiscal Year Ended
December 31, 2019
·
Christophe P. Movill
Executive Director/CEO



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

May 28, 2021

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

FORMAL TRANSMITTAL

We are pleased to submit the Annual Comprehensive Financial Report (Annual Report) of the Illinois Municipal Retirement Fund (IMRF) for the year ended December 31, 2020. IMRF's management 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 the development and evaluation of 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 eight full-time employees, including an Internal Audit Officer, and one part time employee. The Internal Audit department uses detailed internal audit programs that encompass examination of internal controls, employer compliance, and the Fund's financial transactions and records. IMRF engages an independent auditing 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 at least three Board members. Annually, the Internal Audit Officer presents a report to the Audit Committee covering the results of internal audit procedures performed. The Internal Audit Officer may also meet with the committee on an as-needed basis. Again, this year, the Internal 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 gives 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 and can be relied upon.

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 auditors' unmodified audit report on IMRF's 2020 Financial Statements is included in this report. As part of IMRF's auditor rotation program, in 2020 Plante Moran was selected and approved as the new independent auditors. The independent auditors 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. IMRF staff in conjunction with our external auditors were once again able to complete the majority of this audit work remotely due to the pandemic and social distancing, thus overcoming the restrictions put on all staff involved.

The Management Discussion and Analysis (MD&A) beginning on page 21 of this Annual Report provides an overview and analysis of the operations of IMRF and the financial statements. This letter of transmittal is intended to complement the MD&A and should be read in conjunction with it.

www.imrf.org

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 3,031 different employers, 170,735 participating members, 129,779 inactive (not receiving benefits) and 142,329 benefit recipients. The number of participating members was impacted by slow job and income growth in Illinois for 2020. Illinois job and income growth in 2020 was slow, caused by the pandemic. The fourth quarter of 2020 reflected a 7% drop in local government employment compared to the same timeframe from a year earlier.

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 2020 and 2019.

	2020 (millions)	2019 (millions)	Dollar Change (millions)	Percent Change
Additions	\$ 8,100.2	\$ 8,735.9	\$ (635.7)	(7.3)%
Deductions	2,578.3	2,437.0	141.3	5.8%
Net Change	\$ 5,521.9	\$ 6,298.9	\$ (777.0)	(12.3)%

The decrease in Additions between 2020 and 2019 is primarily due to a \$794.9 million decrease in investment income. The 2020 financial markets remained strong and vastly rebounded from the losses in the beginning of 2020 boosted mostly from an improving economy and adapting to the impact of the pandemic. This included increased unemployment and reduction in local revenues with the shuttering of businesses. Consumer spending increased as stimulus money was distributed by the Federal government and consumer quickly developed new spending habits.

The increase in Deductions is primarily due to increased benefit payment amounts and an increase in the number of benefit recipients from 138,089 to 142,329. 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, 2020, valuation, the aggregate actuarial value of assets was \$46.0 billion. The aggregate actuarial liability for all IMRF employers was \$48.9 billion. The aggregate actuarial funding ratio is currently 94.1% (an increase from the 2019 ratio of 90.7%). If the fair value of assets is used (i.e., no actuarial smoothing), the aggregate funding ratio is 103.4% as of December 31, 2020, an increase from 95.1% as of December 31, 2019. 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, 2020, IMRF's market-based funding value was higher than the actuarial funding value since there were \$4,212.3 million of unrecognized actuarial investment gains, which will be reflected in the 2021 through 2024 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 IMRF Board of Trustees last reviewed the funding policy in December 2020, with updated mortality tables being adapted for the December 31, 2020 valuation.

INVESTMENTS

The investment portfolio is a major contributor to the Fund. Year 2020 investment returns resulted in a gain of \$6.7 billion or 14.8%. Looking at it from a long-term perspective of 3, 5, 10 and 20 years, the rates of return are 9.5%, 10.4%, 9.0%, and 7.3% (gross) respectively. The 2020 investment gain represented 83.0% of the Plan Additions for the year. In the past five years—2016 through 2020—investment income represented the following percentage of additions to fiduciary net position:

Year	Percentage of Additions
2020	83.0%
2019	85.9%
2018	(452.8)%
2017	81.5%
2016	67.0%

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 43 professional investment management firms handling 48 mandates. These firms make investment decisions under the Prudent Man Rule authorized by Article 1 of the Illinois Pension Code and by investment firms across 167 separate funds. These firms make investment decisions under the Prudent Man Rule authorized by and the Prudent Man Rule, authorized by Article 1 of the Illinois Pension Code and by investment firms across 167 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.

In 2019, the Investment department added an Internal Equity Management unit. This team of three staff handled approximately \$2.1 billion in assets for 2020.

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. As of January 1, 2020, the Board selected Wilshire Associates to replace Callan and Associates as the investment consultant.

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

Gwen Henry, who has served as Trustee since 2008, was elected to her fourth term as Executive Trustee. Her fourth term will run from January 1, 2021, through December 31, 2025.

Louis Kosiba was elected as Annuitant Trustee. His five-year term began January 1, 2021, through December 31, 2025.

Peter Stefan was elected as Employee Trustee. His five-year term began January 1, 2021, through December 31, 2025.

Tracie Mitchell was elected as Employee Trustee. Her five-year term began January 1, 2021, through December 31, 2025.

B. LEGISLATIVE ACTIVITY APPLICABLE TO IMRF (PASSED IN 2020)

The Illinois Pension Code determines how IMRF operates and administers IMRF benefit plans. IMRF serves its members and employers as a source of information about legislation that affects the pension code and serves as an advocate to represent the interests of members and employers to state lawmakers. Due to the pandemic and related quarantine, no legislation affecting pensions passed the General Assembly in 2020. Two federal bills that affected IMRF passed Congress and were effective in 2020:

Public Act 116-136

In the provisions applicable to IMRF, the CARES (Coronavirus Aid, Relief, and Economic Security) Act makes refunds requested for a "coronavirus-related" purpose exempt from the 10% early withdrawal penalty. It also sets the default withholding rate at 10% of the taxable amount (instead of the usual 20%) for refunds taken under these provisions and allows members to choose to have no tax withheld. It does not make any changes to eligibility for refunds. It is available for all members whose refund check is dated between January 1, 2020 and December 31, 2020.

Public Act 116-94

In the provisions applicable to IMRF, it increased the age from $70\frac{1}{2}$ to 72 for required minimum distributions (RMD), when inactive members who are not receiving a benefit must begin taking distributions. It is applicable to all RMD required to be made after December 31, 2019 for members who reach age $70\frac{1}{2}$ after that date.

C. SYSTEMS DEVELOPMENT

IMRF's major 2020 system development priorities focused on:

- Continuing the Horizon Project system implementation, including the creation of four new environments, and the continuation of Phase 4 "Build and Deploy" segments three and four.
- Completing the implementation of enhanced telephony tools to support IMRF's Customer Service Goals.
- Replacing our Cisco core network.
- Implementing Office 365 and migrating email from Exchange Server to Office 365.
- Finalizing site-to-site data replication between Oak Brook and Wood Dale disaster recovery (DR) site for open systems data and mainframe backup data.
- Installing a generator on-site to ensure business continuity in case of power outages.
- Upgrading CSM SiteCore where imrf.org and intranet COMPASS reside.

IMRF's major 2021 system development priorities will focus on:

- Continuing the Horizon Project system implementation, including the creation of four new environments, and the continuation of Phase 4 "Build and Deploy" segments four and five.
- Building two new environments on site for the Horizon implementation, including integration with external services and components. In 2021 we will build the final production environments.
- Complete Disaster Recovery work to improve our ability to meet our Recovery Time Objectives goals including hardware to expand our DR storage capacity as we continue to modernize IMRF's DR technology infrastructure and implement our replication strategies.
- Implementation of various telephony enhancements to support IMRF's Customer Service Goals.

D. INVESTMENT ACTIVITIES

On December 17, 2020, IMRF staff and its consultant presented the 2021 Asset Allocation Review to the Investment Committee of the IMRF Board of Trustees. Asset allocation targets were approved by the Board and became effective as of January 1, 2021. The 2021, 2020 and 2019 asset allocation targets are listed in the table below:

Asset Class	2021 Target	2020 Target	2019 Target
U.S. equities	39%	37%	37%
International equities	15%	18%	18%
Fixed income	25%	28%	28%
Real estate	10%	9%	9%
Alternative investments	10%	7%	7%
Short term	1%	1%	1%

Major investment activities in 2020 through March 25, 2021 were as follows:

- The 2021 IMRF Investment Committee Charter and Statement of Investment Policy were revised by Staff and approved by the Board.
- Additional commitments were made to 5 follow-on funds of the 5 existing real estate managers. Additional commitments were made to 14 follow-on funds of the 9 existing private equity managers.
- New commitments were made to 2 funds of 2 new private equity firms.
- Funds withdrawn from a terminated international equity manager and a fixed income manager were approved for allocations to a new core-plus fixed income manager; a new core fixed income manager; and to a new internally-managed domestic equity portfolio that will be benchmarked to the GSAM US Large Cap Active Beta FDP model portfolio.
- Following the results of a Minority and Women Owned Business Enterprise Program (MWBE) Manager-of-Managers Search, allocations were approved for a new fixed-income MWBE manager-of-managers account; a new international equity MWBE manager-of-managers account; and for two existing MWBE international equity manager separate accounts.
- An additional \$750 million allocation was made to an existing, internally-managed domestic equity portfolio that is benchmarked to the Scientific Beta United States High Factor Intensity Multi-Beta Multi-Strategy Six-Factor Four-Strategy EW Index (USD Gross Total Return).

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 2021-2023 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 2020. 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

F. ILLINOIS PERFORMANCE EXCELLENCE \ BALDRIGE CRITERIA FOR PERFORMANCE EXCELLENCE

Illinois Performance Excellence (ILPEx/IMEC) 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.

IMRF was proud to be the recipient of the ILPEx Gold Award (representing achievement of excellence) in 2017.

Achieving the highest level of recognition at a state level (ILPEx Gold) qualified 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, qualified for a site visit, and received a comprehensive feedback report. IMRF again submitted an application for the 2019 evaluation cycle and was awarded a site visit for a second year in a row. Our application and participation in the Baldrige program demonstrates IMRF's continued dedication to delivering excellent customer service to our members, annuitants, and employers.

In November 2019, IMRF staff received notice that IMRF is a proud recipient of the Malcolm Baldrige National Quality Award, the first public pension fund in the nation to receive this prestigious award.



Malcolm Baldrige National Quality Award

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, customer experience, and industry best practices. Our strategic objective is to provide the highest quality of service at a median cost. IMRF's total service score placed in the top 15%, while our costs were slightly below the median, as compared to our peer group of 44 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 and allows us to gain valuable insights on trends and innovations occurring within the pension industry around the world.

REPORTS TO MEMBERSHIP

IMRF issued a variety of reports covering 2020 and 2019 activity and provided Employer Statements every month. Annuitant statements were made available online November 2020, Active Member Statements in February 2021, and Inactive Member Statements in March 2021. We will include a summary of this Annual Report for members and annuitants in Fundamentals, IMRF's member newsletter. Authorized Agents were advised in May 2021 that this report, as well as our Popular Annual Financial Report, are available on our website, www.imrf.org.

ADDITIONAL AWARDS AND ACKNOWLEDGMENTS

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 Annual Comprehensive Financial Report for the year ended December 31, 2019. IMRF has received a Certificate of Achievement from the GFOA for the prior 40 consecutive years (fiscal years 1980-2019).

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized Annual Comprehensive 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, 2019.

IMRF received the GFOA Distinguished Budget Award for its 2020 budget. The Government Finance Officers Association of the United States and Canada (GFOA) awarded the Distinguished Budget Presentation Award for the sixth consecutive time to IMRF. The award is for a one-year period. IMRF has applied again for this prestigious award for the 2021 budget document.

In 2020, 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.

ACKNOWLEDGMENTS

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. A special thank you to Finance staff who dealt with pandemic concerns and were still able to produce this report for the Board of Trustees and the 3,031 employers that participate in IMRF.

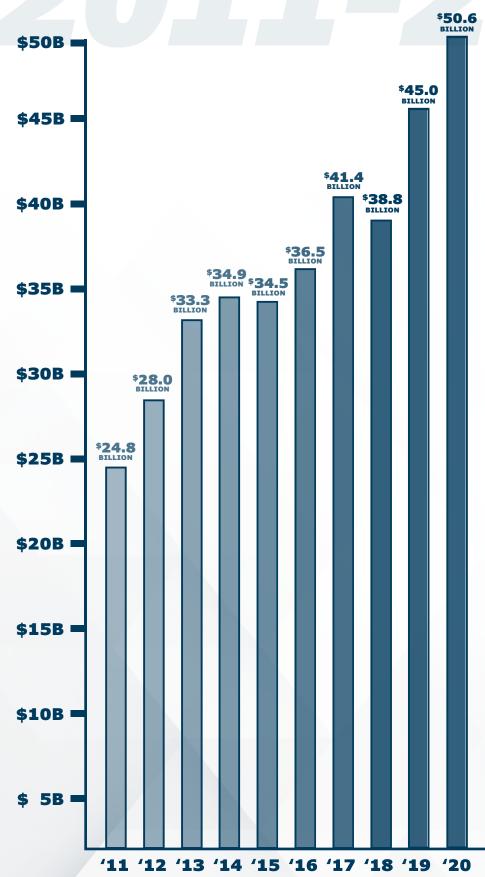
We believe this report provides complete and reliable information for making management decisions, for determining compliance with legal provisions, and for determining responsible stewardship for the assets contributed by our members and their employers.

Brian Collins Executive Director

Would Norman

Mark F. Nannini Chief Financial Officer

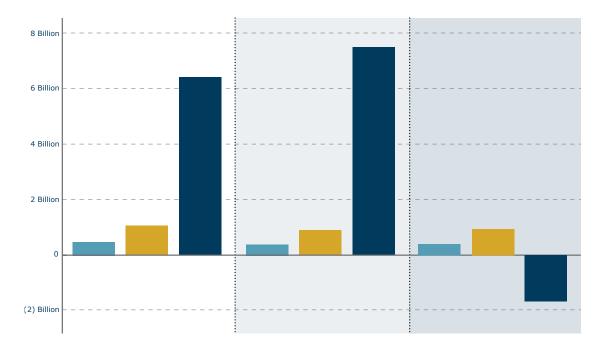
FIDUCIARY NET POSITION



IMRF's financial position has grown steadily over the past 10 years.

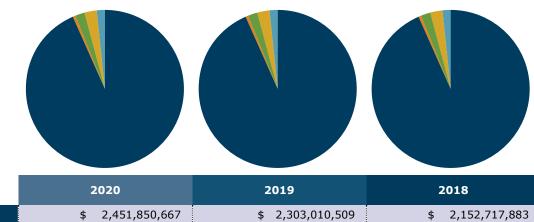
IMRF will continue to provide secure and stable retirements for thousands of public employees in Illinois while limiting employer costs long into the future.

REVENUES BY SOURCE



	2020	2019	2018
Members	\$ 449,724,661	\$ 437,930,911	\$ 413,901,691
Employers	927,591,609	780,149,698	947,568,823
Investments	6,722,902,177	7,517,807,905	(1,747,203,282)
Total	\$ 8,100,218,447	\$ 8,735,888,514	\$ (385,732,768)

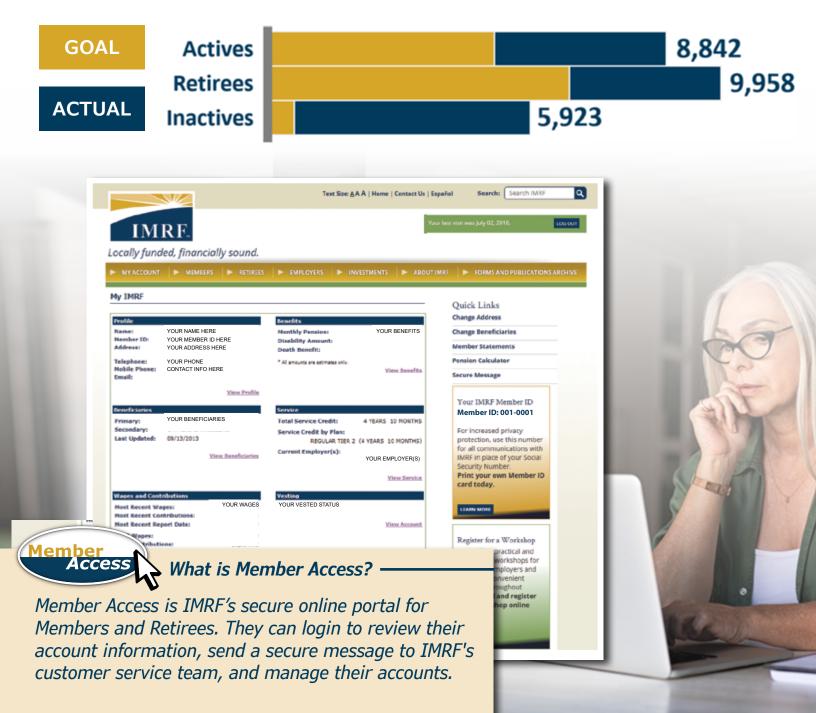
EXPENSES BY TYPE



Total			
Administrative	31,776,955	38,373,543	32,213,168
Refunds	52,178,126	51,372,047	48,028,752
Death	34,083,355	35,347,003	32,803,194
Disability	8,383,136	8,879,576	9,440,326
Annuities	\$ 2,451,850,667	\$ 2,303,010,509	\$ 2,152,717,883



NEW MEMBER ACCESS ACCOUNTS CREATED IN 2020





FINANCIAL

- **19.** Independent Auditor's Report
- 21. Management's Discussion and Analysis

BASIC FINANCIAL STATEMENTS

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Independent Auditor's Report

To the Board of Trustees Illinois Municipal Retirement Fund

Report on the Financial Statements

We have audited the accompanying financial statements of Illinois Municipal Retirement Fund (IMRF) as of and for the year ended December 31, 2020 and the related notes to the financial statements, which collectively comprise IMFR's basic financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. 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 basic 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, 2020 and the changes in fiduciary net position for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Report on Prior Year Financial Statements

The basic financial statements of Illinois Municipal Retirement Fund as of and for the year ended December 31, 2019 were audited by a predecessor auditor, which expressed an unmodified opinion on those basic financial statements. The predecessor auditor's report was dated June 3, 2020.

To the Board of Trustees Illinois Municipal Retirement Fund

Required Supplementary Information

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

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise Illinois Municipal Retirement Fund's basic financial statements. The supplementary information on page 62 and the introduction, investments, actuarial, and statistical sections are presented for the purpose of additional analysis and are not a required part of the basic financial statements.

The supplementary information on page 62 is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplementary information on page 62 is fairly stated in all material respects in relation to the basic financial statements as a whole.

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

Alente 1 Moran, PLLC

May 20, 2021



IMRF

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, 2020, and December 31, 2019. Since the MD&A is designed to focus on current activities, resulting changes, and current known facts, please read it in conjunction with the formal transmittal letter (pages 7-14), 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, liabilities, deferred outflows of resources, and deferred inflows of resources 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 2020, contributions of \$1,377 million, investment gain of \$6,723 million, and deductions to fiduciary net position of \$2,578 million resulted in a net increase of \$5,522 million. This net increase brought the Fund's fiduciary net position to \$50.6 billion.

FIDUCIARY NET POSITION

To begin the financial analysis, summarized comparisons of IMRF's Fiduciary Net Position for 2020 versus 2019 and 2019 versus 2018 are presented below.

CONDENSED STATEMENTS OF FIDUCIARY NET POSITION (IN MILLIONS)

	2020	2019	Dollar Change	Percent Change
Cash and cash equivalents	\$ (5.4)	\$ (3.5)	\$ (1.9)	54.3%
Receivables and prepaids	573.0	507.7	65.3	12.9
Investments	50,273.6	44,755.8	5,517.8	12.3
Invested securities lending cash collateral	237.8	217.7	20.1	9.2
Capital assets, net	48.2	36.4	11.8	32.4
Total assets	51,127.2	45,514.1	5,613.1	12.3
Deferred outflow of resources	4.7	4.3	0.4	9.3
Liabilities	550.9	463.3	87.6	18.9
Deferred inflow of resources	9.1	5.1	4.0	78.4
Fiduciary net position	\$ 50,571.9	\$ 45,050.0	\$ 5,521.9	12.3%

As the table shows, fiduciary net position increased by \$5,522 million, or 12.3% in 2020.

This increase reflects the continued strong investment returns in 2020. The increase in receivables and prepaids in 2020 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 2020 compared to 2019. The increase in liabilities in 2020 is due primarily to the increase in the payables to brokers for unsettled trades at year-end 2020.

The following table presents the investment allocation as of year-end 2020 and 2019, as compared to IMRF's target allocation.

	2020	Target	2019
U.S. equities	40.7%	37.0%	40.1%
International equities	20.4	18.0	19.3
Fixed income	24.0	28.0	28.2
Real estate	7.1	9.0	6.6
Alternative investments	6.4	7.0	5.4
Short-term	1.4	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 2020. IMRF continuously monitors its actual investment allocations in relation to its targets and rebalances as appropriate.

CONDENSED STATEMENTS OF FIDUCIARY NET POSITION (IN MILLIONS)

	2019	2018	Dollar Change	Percent Change
Cash and cash equivalents	\$ (3.5)	\$ 1.3	\$ (4.8)	(369.2)%
Receivables and prepaids	507.7	533.7	(26.0)	(4.9)
Investments	44,755.8	38,511.0	6,244.8	16.2
Invested securities lending cash collateral	217.7	248.6	(30.9)	(12.4)
Capital assets, net	36.4	23.9	12.5	52.3
Total assets	45,514.1	39,318.5	6,195.6	15.8
Deferred outflow of resources	4.3	0.1	4.2	4,200.0
Liabilities	463.3	567.0	(103.7)	(18.3)
Deferred inflow of resources	5.1	0.5	4.6	920.0
Fiduciary net position	\$ 45,050.0	\$ 38,751.1	\$ 6,298.9	16.3%

As the table shows, fiduciary net position increased by \$6,299 million, or 16.3% in 2019.

This increase reflects the gain in investment returns in 2019. The decrease in receivables and prepaids in 2019 is largely due to the decrease in the receivables from brokers for unsettled trades at year-end due to a larger number of trades outstanding at year-end 2019 compared to 2018. The decrease in liabilities in 2019 is due primarily to the decrease in the payables to brokers for unsettled trades at year-end 2019.



IMRF

CHANGES IN FIDUCIARY NET POSITION

Summarized comparisons of IMRF's Changes in Fiduciary Net Position for 2020 versus 2019 are presented below.

CONDENSED STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION (IN MILLIONS)

	2020	2019	Dollar Change	Percent Change
Additions				
Member contributions	\$ 449.7	\$ 437.9	\$ 11.8	2.7%
Employer contributions	927.6	780.2	147.4	18.9
Net investment gain	6,722.9	7,517.8	(794.9)	(10.6)
Total additions	\$ 8,100.2	\$ 8,735.9	\$ (635.7)	(7.3)%
Deductions				
Benefits	2,494.3	2,347.2	147.1	6.3
Refunds	52.2	51.4	0.8	1.6
Administrative expenses	31.8	38.4	(6.6)	(17.2)
Total deductions	2,578.3	2,437.0	141.3	5.8
Net increase in fiduciary net position	\$ 5,521.9	\$ 6,298.9	\$ (777.0)	(12.3)%

ADDITIONS

Additions needed to fund benefits are accumulated through contributions and returns on invested funds. Contributions for 2020 totaled \$1,377 million which was 13.1% more than 2019. The increase reflects the increase in the average employer contribution rate to 11.6% in 2020 from 9.6% in 2019. 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 gains for 2020 were 14.8%. The \$6,723 million investment gain in 2020 represents a decrease of \$795 million from the \$7,518 million gain in 2019. IMRF's 2020 total investment portfolio return was positive due to a robust economy with increased consumer spending fueled by stimulus payments and optimism about the end of the pandemic.

In 2020, IMRF had net appreciation in the value of investments of \$6,018, a \$679 million decrease from the \$6,697 million of appreciation recorded in 2019. Interest, dividends, and equity fund income totaled \$855 million, a decrease from \$955 million in 2019. Securities lending income net of related expenses was \$9.7 million for 2020, an increase of \$2.6 million from 2019. Direct investment expenses increased to \$159 million in 2020 from \$142 million in 2019.

The total rate of return for the portfolio in 2020 was 14.8% compared to 19.6% in 2019. IMRF's U.S. stock portfolio returned a 21.9% compared to 20.9% custom benchmark. The fixed income portfolio returned 7.8% compared to 7.5% for the Bloomberg Aggregate Bond Index. The international stock portfolio returned 13.1% compared to 10.7% for the MSCI All-Country World Index ex-US. The real estate portfolio returned 4.2% compared to 0.3% for the custom benchmark. The alternative investment portfolio returned 12.3%.

DEDUCTIONS

The expenses paid by IMRF include benefit payments, refunds, and administrative expenses. Expenses for 2020 totaled \$2,578 million, \$141 million over 2019. The increase in benefit payments to members and beneficiaries resulted primarily from growth in the number of annuitants to 142,329 in 2020 from 138,089 in 2019, as well as an increase in the amount of the average benefit.

CONDENSED STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION (IN MILLIONS)

	2019	2018	Dollar Change	Percent Change
Additions				
Member contributions	\$ 437.9	\$ 413.9	\$ 24.0	5.8%
Employer contributions	780.2	947.6	(167.4)	(17.7)
Net investment (loss) gain	7,517.8	(1,747.2)	9,265.0	(530.3)
Total additions	8,735.9	(385.7)	9,121.6	(2,364.9)
Deductions				
Benefits	2,347.2	2,195.0	152.2	6.9
Refunds	51.4	48.0	3.4	7.1
Administrative expenses	38.4	32.2	6.2	19.3
Total deductions	2,437.0	2,275.2	161.8	7.1
Net (decrease) increase in fiduciary net position	\$ 6,298.9	\$ (2,660.9)	\$ 8,959.8	(336.7)%

ADDITIONS

Additions needed to fund benefits are accumulated through contributions and returns on invested funds. Contributions for 2019 totaled \$1,218 million which was 10.5% less than 2018. The decrease reflects the decrease in the average employer contribution rate to 9.6% in 2019 from 11.8% in 2018. 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 gains for 2019 were a 19.6%. The \$7,518 million investment gain in 2019 represents a \$9,265 million change from the \$1,747 million loss in 2018. IMRF's 2019 total investment portfolio return was up due to lowering of interest rates by the Federal Reserve and large gains in the technology markets in 2019.

In 2019, IMRF had net depreciation in the value of investments of \$6,697 million, a \$9,152 million change from the \$2,455 million of appreciation recorded in 2018. Interest, dividends, and equity fund income totaled \$955 million, an increase from \$827 million in 2018. Securities lending income net of related expenses was \$7.1 million for 2019, a decrease of \$142 thousand from 2018. Direct investment expenses increased to \$142 million in 2019 from \$127 million in 2018.

The total rate of return for the portfolio in 2019 was a negative 19.6% compared to 4.4% in 2018. IMRF's U.S. stock portfolio returned a 29.0% compared to a 31.0% custom benchmark. The fixed income portfolio returned a 9.4% compared to 8.7% for the Bloomberg Aggregate Bond Index. The international stock portfolio returned a 23.4% compared to 21.5% for the MSCI All-Country World Index ex-US. The real estate portfolio returned 9.8% compared to 4.4% for the custom benchmark. The alternative investment portfolio returned 9.5%.

DEDUCTIONS

The expenses paid by IMRF include benefit payments, refunds, and administrative expenses. Expenses for 2019 totaled \$2,437 million, an increase of \$161.8 million over 2018. The increase in benefit payments to members and beneficiaries resulted primarily from growth in the number of annuitants to 138,089 in 2019 from 133,261 in 2018, 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:

For the year ended	Return
December 31, 2020	15.20%
December 31, 2019	19.82%
December 31, 2018	(4.19)%



STATEMENTS OF FIDUCIARY NET POSITION

As of December 31	2020	2019	
Assets			
Cash and cash equivalents	\$ (5,389,893)	\$ (3,472,629)	
Receivables and prepaid expenses			
Contributions	92,115,616	68,229,990	
Investment income	100,774,056	104,455,321	
Receivables from brokers for unsettled trades	190,772,228	157,778,830	
Prepaid expenses	189,301,995	177,193,463	
Total receivables and prepaid expenses	572,963,895	507,657,604	
Investments, at fair value			
Fixed income	12,055,301,447	12,384,559,767	
Stocks	30,708,540,954	26,181,173,943	
Short-term investments	734,750,538	671,877,130	
Real estate	3,565,721,898	3,298,006,160	
Alternative investments	3,209,323,541	2,220,169,417	
Total investments	50,273,638,378	44,755,786,417	
Invested securities lending cash collateral	237,845,278	217,716,823	
Capital assets			
Equipment, at cost	69,572,141	55,397,642	
Accumulated depreciation	(21,331,762)	(19,015,040)	
Total capital assets	48,240,379	36,382,602	
Total assets	51,127,298,037	45,514,070,817	
Total deferred outflow of resources	4,722,490	4,325,530	
Liabilities			
Accrued expenses and benefits payable	39,377,231	41,647,637	
Securities lending cash collateral	237,845,278	217,716,823	
Payables to brokers for unsettled trades	273,716,514	203,970,295	
Total liabilities	550,939,023	463,334,755	
Total deferred inflow of resources	9,159,057	5,085,353	
Net position restricted for pensions	\$ 50,571,922,447	\$ 45,049,976,239	

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

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

For the Years Ended December 31	2020	2019
Additions		
Contributions		
Members for retirement coverage	\$ 449,724,661	\$ 437,930,911
Employers for benefit plan coverage	927,591,609	780,149,698
Total contributions	1,377,316,270	1,218,080,609
Investment income		
From investing activities		
Interest	321,434,065	380,330,748
Dividends	328,059,916	387,113,103
Equity fund income, net	205,024,829	188,013,712
Net appreciation in fair value of investments	6,017,852,304	6,697,249,523
Investment activity gain	6,872,371,114	7,652,707,086
Less: Direct investment expense	(159,185,717)	(142,042,364)
Net investment activity gain	6,713,185,397	7,510,664,722
From security lending activity	<u> </u>	
Securities lending income	6,753,523	9,727,179
Net securities lending management fees and borrower rebates	2,950,332	(2,599,296)
Net security lending activity income	9,703,855	7,127,883
Total investment gain	6,722,889,252	7,517,792,605
Other	12,925	15,300
Total additions	8,100,218,447	8,735,888,514
Deductions		
Annuities	2,451,850,667	2,303,010,509
Disability benefits	8,383,136	8,879,576
Death benefits	34,083,355	35,347,003
Refunds	52,178,126	51,372,047
Administrative expenses	31,776,955	38,373,543
Total deductions	2,578,272,239	2,436,982,678
Net increase	5,521,946,208	6,298,905,836
Net position restricted for pensions		
Beginning of year	45,049,976,239	38,751,070,403
End of year	\$ 50,571,922,447	\$ 45,049,976,239

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



IMRF

NOTES TO BASIC FINANCIAL STATEMENTS (December 31, 2020 and 2019)

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.

1. EMPLOYERS

	2020	2019
Participating employers	3,031	3,025

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-forprofit 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

	2020	2019
Inactive members		
Retirees and beneficiaries currently receiving benefits	142,329	138,089
Terminated members entitled to benefits but not yet receiving them	15,011	14,229
Terminated members—non-vested	114,768	109,941
Total inactive members	272,108	262,259
Active members		
Non-vested	89,285	93,890
Vested	81,450	83,919
Total active members	170,735	177,809
Grand total	442,843	440,068

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 are 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 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, 2020, and December 31, 2019. The ECO plan was created by statute in 1997 and was revised in 2000. In 2010 the 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 \$115,928.92 for 2020 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 \$115,928.92 for 2020 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 \$115,928.92 for 2020 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, discount 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

IMRF

Members who 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.

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

The named beneficiaries of a deceased retired member receive their share of a one-time death benefit of \$3,000. In addition to the lump sum benefit, an eligible spouse receives a monthly pension equal to 50% (66 2/3% for ECO retirees and Tier 2 members) of the member's pension. The beneficiaries of an active member who had at least one year of service, receive a lump sum 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 economic resources measurement focus and 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 by using quoted market prices and other observable significant inputs including quoted prices for similar securities, interest rates, and fixed income pricing models provided by independent pricing services. For commingled funds, fair value is determined using the net asset value certified by the commingled fund manager as of December 31. Alternative investments, which include real estate, private equity and absolute return funds, fair value is determined using the net asset value (NAV) per share established by fund managers, which are subject to annual audit. 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 OUTFLOWS/INFLOWS OF RESOURCES

The Statements of Fiduciary Net Position, in addition to assets, includes 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 (deduction) until then. In addition to liabilities, the Statements of Fiduciary Net Position includes 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 (addition) until that time.

8. RECLASSIFICATIONS

Certain prior year amounts have been reclassified to conform to the current year presentation.

C. NEW ACCOUNTING PRONOUNCEMENTS

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, 2022 financial statements.

In January 2020, GASB issued Statement No. 92, "*Omnibus 2020*." The objectives of this Statement are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics and includes specific provisions about the following:

- The effective date of Statement No. 87, Leases, and Implementation Guide No. 2019-3, Leases, for interim financial reports.
- Reporting of intra-entity transfers of assets between a primary government employer and a component unit defined benefit pension plan or defined benefit other postemployment benefit (OPEB) plan.
- The applicability of Statements No. 73, Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68, as amended, and No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, as amended, to reporting assets accumulated for postemployment benefits.

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- The applicability of certain requirements of Statement No. 84, Fiduciary Activities, to postemployment benefit arrangements.
- Measurement of liabilities (and assets, if any) related to asset retirement obligations (AROs) in a government acquisition.
- Reporting by public entity risk pools for amounts that are recoverable from reinsurers or excess insurers.
- Reference to nonrecurring fair value measurements of assets or liabilities in authoritative literature.
- Terminology used to refer to derivative instruments.

IMRF is currently reviewing how this statement will impact its future financial statements, which has various effective dates depending on the provision.

In March 2020, GASB issued Statement No. 93, "*Replacement of Interbank Offered Rates.*" The objective of this Statement is to address those and other accounting and financial reporting implications that result from the replacement of an Interbank Offered Rate (IBOR). Statement No. 93 is effective for IMRF's December 31, 2021 financial statements. IMRF is currently reviewing how this statement will impact its future financial reporting.

In March 2020, GASB issued Statement No. 94, "Public-Private and Public-Public Partnerships and Availability Payment Arrangements." The primary objective of this Statement is to improve financial reporting by addressing issues related to public-private and public-public partnership arrangements (PPPs). As used in this Statement, a PPP is an arrangement in which a government (the transferor) contracts with an operator (a governmental or nongovernmental entity) to provide public services by conveying control of the right to operate or use a nonfinancial asset, such as infrastructure or other capital asset (the underlying PPP asset), for a period of time in an exchange or exchange-like transaction. This Statement also provides guidance for accounting and financial reporting for availability payment arrangements (APAs). As defined in this Statement, an APA is an arrangement in which a government compensates an operator for services that may include designing, constructing, financing, maintaining, or operating an underlying nonfinancial asset for a period of time in an exchange or exchange-like transaction. IMRF is currently reviewing how this statement will impact its future financial statements. Statement No. 94, if applicable will be adopted with IMRF's December 31, 2023 year-end.

In May 2020, GASB issued Statement No. 96, "Subscription-Based Information Technology Arrangements." The primary objective of this Statement is to provide guidance on the accounting and financial reporting for subscription-based information technology arrangements (SBITA). IMRF will adopt Statement No. 96 for its December 31, 2023 financial statements.

In June 2020, GASB issued Statement No. 97, "Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans." The primary objectives of this Statement are to (1) increase consistency and comparability related to the reporting of fiduciary component units in circumstances in which a potential component unit does not have a governing board and the primary government performs the duties that a governing board typically would perform; (2) mitigate costs associated with the reporting of certain defined contribution pension plans, defined contribution other postemployment benefit (OPEB) plans, and employee benefit plans other than pension plans or OPEB plans (other employee benefit plans) as fiduciary component units in fiduciary fund financial statements; and (3) enhance the relevance, consistency, and comparability of the accounting and financial reporting for Internal Revenue Code (IRC) Section 457 deferred compensation plans (Section 457 plans) that meet the definition of a pension plan and for benefits provided through those plans. IMRF does not anticipate this standard will have a significant impact on the Fund.

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. Cash held in non-investment-related bank accounts is neither insured nor collateralized for amounts in excess of \$250,000 by the Federal Deposit Insurance Corporation (FDIC). 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 1 benefit payments. These payments are recorded as a prepaid as of December 31 in the financial statements. Cash equivalents are typically short-term investments that have high credit quality and are highly liquid. 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.

	2020	2019
Carrying amounts at December 31		
Cash and cash equivalents	\$ (5,389,893)	\$ (3,472,629)
Bank balances at December 31		
Bank balances	\$ 121,174	\$ 289,591
Amount exposed to custodial credit risk		
Cash balance held with investment manager exposed to custodial credit risk	\$ 1,354,238	\$ 1,322,997

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 IMRF 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, 2020.

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

For the year ended December 31, 2020, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 15.20%. For the year ended December 31, 2019, it was a 19.82%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

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3. INVESTMENT SUMMARY

The following table presents a summary of the Fund's investments by type at December 31, 2020 and 2019:

	2020	2019
U.S. government & agency fixed income	\$ 3,170,256,730	\$ 3,823,800,631
U.S. corporate fixed income	3,632,124,119	3,619,657,525
U.S. fixed income funds	3,890,462,031	3,605,524,429
Foreign fixed income securities	802,751,514	759,903,472
Foreign fixed income funds	559,707,053	575,673,710
U.S. equities	16,379,737,220	13,911,547,161
U.S. equity funds	4,069,464,918	3,874,360,305
Foreign equities	6,692,071,873	5,319,418,312
Foreign equity funds	3,567,266,943	3,075,848,165
Foreign currency forward contracts	2,452,889	(3,032,063)
Pooled short-term investment funds	715,861,592	658,169,353
Real estate	3,565,721,898	3,298,006,160
Private equity	3,209,146,204	2,219,677,446
Absolute return funds	177,337	491,971
Swaps	8,314,388	5,131,867
Options	19,538	121,392
Other	8,102,131	11,486,581
Total investments at fair value	\$ 50,273,638,378	\$ 44,755,786,417

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. 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. The NT Collective U.S. Marketcap Equity Index Fund does represent greater than 5% of fiduciary net position for each year end.

	2020	2019
MFB NT Collective Aggregate Bond Index Fund	\$ 1,946,269,369	\$ 1,809,158,439
BlackRock US Debt Index Fund	1,867,344,078	1,734,360,670
NT Collective U.S. Marketcap Equity Index Fund	2,948,174,213	2,622,330,010
NT Collective EAFE Index Fund	2,094,370,592	2,010,705,163
Genesis Emerging Markets Fund	1,457,611,946	1,058,284,461

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:

		2020	2019
33	Investments in foreign currency	\$ 9,620,632	\$ 13,326,733

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 fair value.
- D. Generally, no more than 30% of a manager's assets at fair 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 fair 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.

	2020	2019
Corporate and International		
AAA	\$ 187,650,471	\$ 271,036,121
AA	253,616,967	527,064,577
A	817,986,676	1,001,720,052
BBB	1,623,610,842	1,390,186,294
BB	760,386,141	730,208,327
В	347,745,959	324,266,966
ССС	71,330,670	36,459,118
СС	20,680	5,715,279
С	-	-
D	2,418,267	1,537,336
Not Rated	280,634,770	79,484,763
Government and Agencies		
Agency	2,387,915,762	2,363,491,414
AAA	238,984,529	67,633,742
AA	604,718,232	1,376,543,148
A	17,698,581	22,207,554
BBB	4,182,030	3,903,783
BB	870,922	844,350
В	1,148,410	-
Not Rated	4,212,454	1,058,804
Fixed Income Funds		
Index	4,450,169,084	4,181,198,139
Total	\$ 12,055,301,447	\$ 12,384,559,767

Quality Rating

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The "Agency" caption in the above table does not have a specific credit quality rating since they were not covered by the rating agencies. Typically these securities have at least an AA credit quality rating. The U.S. fixed income fund had an average credit quality rating of AAA for 2020 and AA for 2019. The international fixed income fund had an average quality rating B for 2020 and 2019.

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 Barclays Aggregate Bond Index. At December 31, 2020 and December 31, 2019, the effective duration of the Barclays Aggregate Bond Index was 6.05 and 5.87, respectively. At the same points in time, the effective duration of IMRF debt securities portfolio was 3.95 and 4.70, respectively.

Investment	2020 Fair Value	Effective Weighted Duration Rate	2019 Fair Value	Effective Weighted Duration Rate
U.S. Corporate	\$ 3,632,124,119	5.03	\$ 3,619,657,525	4.24
U.S. Government & Agencies	3,170,256,730	5.04	3,823,800,631	5.47
U.S. Fixed Income Funds	3,890,462,031	2.90	3,605,524,429	5.61
International	802,751,514	2.34	759,903,472	2.17
International Fixed Income Fund	559,707,053	0.24	575,673,710	0.20
Total	\$ 12,055,301,447	3.95	\$ 12,384,559,767	4.70

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:

	2020	2019
Foreign Equities		
Australian dollar	\$ 140,519,082	\$ 157,765,715
Brazilian real	112,814,917	115,644,015
British pound sterling	701,229,318	762,742,384
Canadian dollar	240,949,539	202,219,942
Chilean peso	6,927,435	7,613,479
Colombian peso	6,941,493	1,487,013
Czech koruna	-	4,888,727
Danish krone	154,000,161	117,009,183
Euro	1,505,361,493	1,442,832,494
Hong Kong dollar	478,486,950	404,499,431
Hungarian forint	5,564,392	7,234,796
Indian rupee	81,803,961	56,449,641
Indonesian rupiah	15,645,061	20,593,352
Japanese yen	874,204,775	806,161,580
Malaysian ringgit	424,939	6,797,286
Mexican peso	72,188,843	70,347,331
New Israeli shekel	6,450,316	8,087,708
New Taiwan dollar	270,287,681	151,348,565
New Zealand dollar	10,697,671	13,322,156
Norwegian krone	50,693,493	33,181,628
Philippine peso	-	254,065
Polish zloty	4,619,560	8,700,359
Russian ruble	-	2,920,060
Singapore dollar	34,826,410	45,483,753
South African rand	11,772,060	20,812,503
South Korean won	204,804,892	151,184,020
Swedish krona	190,591,567	128,173,887
Swiss franc	368,345,275	279,919,847
Thai baht	20,523,486	25,656,639
Turkish lira	29,859,536	18,775,715
United Arab Emirates dirham	2,315,289	1,820,169
United States dollar	3,198,877,275	3,321,339,034
Total Foreign Equities	\$ 8,801,726,870	\$ 8,395,266,477

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	2020	2019
Foreign Fixed Income		
Argentine peso	\$ -	\$ 2,501,212
Australian dollar	15,039,767	-
Brazilian real	16,308,836	20,215,033
Canadian dollar	9,349,258	845,509
Chilean peso	10,113,716	2,222,822
Colombian peso	7,599,141	7,147,331
Czech koruna	1,445,126	1,318,067
Euro	15,876,083	1,620,421
Hungarian forint	2,303,203	1,311,525
Indian rupee	973,890	968,616
Indonesian rupiah	20,885,175	18,816,903
Japanese yen	4,893,759	4,758,950
Kazakhstan tenge	-	321,187
Malaysian ringgit	5,418,455	7,254,265
Mexican peso	40,586,500	30,547,474
Norwegian krone		1,058,414
Peruvian nuevo sol	3,147,009	5,244,306
Polish zloty	-	9,742,413
Russian ruble	31,336,143	26,894,070
South African rand	13,426,683	13,806,908
Thai baht	9,717,894	9,469,741
Turkish lira	489,144	3,982,082
United States dollar	1,153,548,785	1,165,529,933
Total Foreign Fixed Income	1,362,458,567	1,335,577,182
Total	\$ 10,164,185,437	\$ 9,730,843,659

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 Company. 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 for collateral that may include cash, U.S. government securities and irrevocable letters of credit. U.S. securities are loaned for 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 207 days as of December 31, 2020, and 206 days as of December 31, 2019. 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.

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 30 days as of December 31, 2020, and 25 days as of December 31, 2019. 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 2020 and 2019, 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 \$237,845,278 and \$217,716,823 at December 31, 2020 and December 31, 2019, respectively.

Loans outstanding as of	December 31, 2020	December 31, 2019
Fair value of securities loaned	\$ 1,986,173,558	\$ 1,239,985,027
Fair value of collateral received	\$ 2,033,847,864	\$ 1,277,448,670

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 degrees 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.

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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, 2020 and December 31, 2019 is as follows:

Fair Value as of	December 31, 2020	December 31, 2019
Pending Foreign Exchange Purchases		
Australian dollar	\$ 47,606,450	\$ 7,667,437
Brazilian real	13,283,208	11,346,583
British pound sterling	14,147,663	50,941,850
Canadian dollar	61,559,951	63,973,131
Chilean peso	4,080,254	4,717,659
Chinese yuan renminbi	16,171,368	5,373,181
Colombian peso	5,968,212	8,691,673
Czech koruna	8,843,364	7,441,246
Danish krone	12,480,136	5,621,316
Euro	58,547,734	32,050,876
Hong Kong dollar	16,933,733	8,693,884
Hong Kong offshore Chinese yuan renminbi	124,108,344	20,581,905
Hungarian forint	6,186,085	2,504,265
Indian rupee	14,071,755	30,083,919
Indonesian rupiah	20,365,723	12,453,752
Japanese yen	46,037,017	39,777,381
Malaysian ringgit	3,289,419	1,699,083
Mexican peso	13,886,518	4,626,409
New Israeli shekel	1,841,279	617,920
New Romanian leu	1,672,431	3,014,521
New Taiwan dollar	1,268,297	5,258,599
New Zealand dollar	70,627,311	40,968,201
Norwegian krone	16,409,278	13,454,744
Peruvian nuevo sol	514,333	66,380
Philippine peso	1,143,510	659,931
Polish zloty	23,393,633	10,537,295
Russian ruble	9,904,138	1,560,290
Saudi riyal	324,351	-
Singapore dollar	9,939,132	6,232,559
South African rand	11,357,382	7,123,925
South Korean won	7,486,552	1,244,373
Swedish krona	18,080,322	9,017,920
Swiss franc	38,992,310	28,720,766
Thai baht	8,593,267	3,134,876
Turkish lira	20,072,546	1,070,477
United Arab Emirates dirham	3,584,102	-
United States dollar	819,956,016	527,626,757
Total Purchases	\$ 1,552,727,124	\$ 978,555,084

Locally funded, financially sound.

Fair Value as of	December 31, 2020	December 31, 2019
Pending Foreign Exchange Sales		
Australian dollar	\$ (30,666,216)	\$ (45,758,151)
Brazilian real	(53,446,504)	(15,942,197)
British pound sterling	(43,812,636)	(30,306,362)
Canadian dollar	(105,835,751)	(8,397,846)
Chilean peso	(6,763,089)	(1,874,369)
Chinese yuan renminbi	(2,227,619)	(1,479,992)
Colombian peso	(3,882,461)	-
Danish krone	(21,601,940)	(27,499,594)
Euro	(168,787,826)	(104,649,804)
Hong Kong dollar	(18,500,160)	(17,605,261)
Hong Kong offshore Chinese yuan renminbi	(2,741,167)	-
Hungarian forint	(3,351,926)	(1,442,035)
Indian rupee	(17,194,752)	(5,703,932)
Indonesian rupiah	(22,348,333)	(9,954,104)
Japanese yen	(40,418,285)	(20,256,335)
Mexican peso	(8,763,140)	(7,924,986)
New Israeli shekel	(5,527,625)	(1,903,740)
New Taiwan dollar	(125,337,587)	(35,156,133)
New Zealand dollar	(6,945,554)	(19,545,518)
Norwegian krone	(8,175,313)	(7,068,521)
Peruvian nuevo sol	-	(5,995,284)
Philippine peso	(4,462,216)	(10,525,425)
Polish zloty	(9,402,118)	(9,314,019)
Russian ruble	(22,759,305)	(24,299,177)
Saudi riyal	(301,668)	-
Singapore dollar	(9,988,494)	(7,913,997)
South African rand	(4,627,207)	(15,852,264)
South Korean won	(49,975,006)	(32,007,887)
Swedish krona	(9,732,269)	(22,675,149)
Swiss franc	(19,642,229)	(36,133,148)
Thai baht	(4,599,220)	(1,121,044)
Turkish lira	(4,614,616)	(8,753,994)
United Arab Emirates dirham	(1,540,798)	-
United States dollar	(712,301,205)	(444,526,879)
Total Sales	(1,550,274,235)	(981,587,147)
Net Unrealized Gain/(Loss)	\$ 2,452,889	\$ (3,032,063)

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Financial futures are similar to forward contracts, except futures contracts are standardized and traded on organized exchanges. As the fair 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, 2020 and December 31, 2019 are as follows:

Fair Value as of	December 31, 2020		December 3	Change	
	Amount	Number of Contracts	Amount	Number of Contracts	Amount
Fixed income derivative futures sold	\$ 181,361,980	797	\$149,161,980	726	\$ 32,200,000
Fixed income derivative offset futures purchased	181,361,980	797	149,161,980	726	32,200,000
Fixed income derivative offset futures sold	271,707,220	1,769	408,344,090	3,148	(136,636,870)
Fixed income derivative futures purchased	271,707,220	1,769	408,344,090	3,148	(136,636,870)
Equity derivative offset futures sold	\$ 46,110,240	-	\$ 35,865,210	-	\$ 10,245,030
Equity derivative futures purchased	46,110,240	246	35,865,210	222	10,245,030
			_		
Cash and cash equivalent derivative futures sold	\$ 352,080,962	1,411	\$ 49,455,162	201	\$ 302,625,800
Cash and cash equivalent derivative offset futures purchased	352,080,962	1,411	49,455,162	201	302,625,800
Cash and cash equivalent derivative offset futures sold	-	-	277,166,325	1,127	(277,166,325)
Cash and cash equivalent derivative futures purchased	-	-	277,166,325	1,127	(277,166,325)

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, 2020, and December 31, 2019 are as follows:

Fair Value as of	December 31, 2020		Decembe	December 31, 2019	
	Amount	Notional Value	Amount	Notional Value	Amount
Financial put options	\$ 41,756	\$ 1,200	\$ 151,672	\$ 459	\$ (109,916)
Financial call options	(22,218)	874	(30,280)	1,858	8,062

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, 2020, and December 31, 2019 are as follows:

Fair Value as of	December 31, 2020	Decembe	er 31, 2019	Change
Swaps, gain/(loss)	\$ 8,314	,388	\$ 5,131,867	\$ 3,182,521
	As of Decemi	her 31 2020		Change in
		501,2020	<u> </u>	Fair Value
Type of Swap	Notional Value	Fair Value	Counterparty Credit Rating	Amount
Credit Default Swap	\$-	\$ -	AA	\$ (24,835)
Credit Default Swap	-	-	AA	-
Credit Default Swap	-	-	А	(1,852,802)
Credit Default Swap	90,766,000	2,781,212	NR *	1,814,244
Credit Default Swap	90,766,000	-	NR *	545,898
Interest Rate Swap	50,379,000	951,463	А	951,463
Interest Rate Swap	50,379,000	-	А	-
Interest Rate Swap	609,640,000	4,581,713	NR *	1,374,634
Interest Rate Swap	609,640,000	-	NR *	373,919
Total	\$ 1,501,570,000	\$ 8,314,388		\$ 3,182,521

As of December 31, 2019								
Type of Swap	Notio	Notional Value Fair V		r Value	Counterparty Credit Rating			
Credit Default Swap	\$	822,000	\$	24,835	AA			
Credit Default Swap		822,000		-	AA			
Credit Default Swap		199,599,000		1,852,802	А			
Credit Default Swap		36,815,000		966,968	NR *			
Credit Default Swap		5,568,750		(545,898)	NR *			
Interest Rate Swap		-		-	А			
Interest Rate Swap		-		-	А			
Interest Rate Swap		616,876,700		3,207,079	NR *			
Interest Rate Swap		530,599,700		(373,919)	NR *			
Total	\$1,3	91,103,150	\$	5,131,867				

 $NR^* = Not \ rated.$

G. FUTURE INVESTMENT COMMITMENTS

At December 31, 2020 and December 31, 2019, IMRF had future commitments for additional contributions to real estate and alternative investment managers totaling \$3,812,836,918 and \$3,525,875,201, respectively.



H. FAIR VALUE MEASUREMENT

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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 and may include situations where there is minimal, if any, market activity for the investment.

If the fair value is measured using inputs from different levels in the fair value hierarchy, the measurement 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 judgment 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.

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, and inputs that cannot be corroborated by observable market data and/ or due to limited trading volume.

Alternative investments are measured at fair value using the NAV per share as a practical expedient to fair value. Investments measured at NAV are not classified in the fair value hierarchy

Investments measured at amortized cost consist of IMRF's Short-Term Investment Funds (STIF) account offered though the Funds custodial bank. These are not included in the fair value hierarchy and are presented only to show comparability between the Fair Value tables and the amounts shown in the Schedules of Fiduciary Net Position for Total investments.

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, 2020, and December 31, 2019.

Locally funded, financially sound.

	As of December 31, 2020						
	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	\$ 3,170,256,730	\$ 1,405,360,987	\$ 1,675,127,096	\$ 89,768,647	\$ -		
U.S. corporate fixed income	3,632,124,119	-	3,469,140,861	162,983,258	-		
U.S. fixed income funds	3,890,462,031	-	1,946,269,369	-	1,944,192,662		
Foreign fixed income funds	1,362,458,567	-	796,765,976	5,985,538	559,707,053		
Fixed income	12,055,301,447	1,405,360,987	7,887,303,302	258,737,443	2,503,899,715		
U.S. equities	16,379,737,220	16,377,308,470	822,900	1,605,850	-		
U.S. equity funds	5,527,076,864	5,527,076,864	-	-	-		
Foreign equities	6,692,071,873	6,692,038,206	-	33,667	-		
Foreign equity funds	2,109,654,997	2,109,654,997	-	-	-		
Equity	30,708,540,954	30,706,078,537	822,900	1,639,517	-		
Real estate	3,565,721,898	-	-	170,735,464	3,394,986,434		
Private equity	3,209,146,204	-	-	205,042,515	3,004,103,689		
Absolute return funds	177,337	-	-	-	177,337		
Options	19,538	19,538	-	-	-		
Swaps	8,314,388	-	8,314,388	-	-		
Investments measured at fair value	\$49,547,221,766	\$32,111,459,062	\$7,896,440,590	\$636,154,939	\$8,903,167,175		
Investments measured at amortized cost	726,416,612						
Total	\$50,273,638,378						

	Investments measured at Net Asset Value (NAV)			
Year Ended December 31, 2020	Fair Value	Unfunded Commitments	Redemption Frequency (if currently eligible)	Redemption Notice Period
U.S. fixed income funds	\$ 1,944,192,662	\$-	Daily	0-2 Days
Foreign fixed income	559,707,053	-	Daily	30 Days
Commingled Fixed Income Funds Total	2,503,899,715	-		
Real estate	3,394,986,434	1,340,318,896	Quarterly, Not Eligible	30-60 days, N/A
Private equity	3,004,103,689	2,306,573,034	Quarterly, Not Eligible	60 days, N/A
Absolute return funds	177,337	-	Monthly, Quarterly	Notice in Place
Investments measured at NAV	\$8,903,167,175	\$3,646,891,930		

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	As of December 31, 2019				
		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	\$ 3,823,800,631	\$ 1,670,652,448	\$ 2,096,698,516	\$ 56,449,667	\$-
U.S. corporate fixed income	3,619,657,525	-	3,483,240,492	136,417,033	-
U.S. fixed income funds	3,605,524,429	-	1,809,158,439	-	1,796,365,990
Foreign fixed income funds	1,335,577,182	-	740,133,793	19,769,679	575,673,710
Fixed income	12,384,559,767	1,670,652,448	8,129,231,240	212,636,379	2,372,039,700
U.S. equities	13,911,547,161	13,905,601,034	912,004	5,034,123	-
U.S. equity funds	3,874,360,305	3,874,360,305	-	-	-
Foreign equities	5,319,418,312	5,319,418,312	-	-	-
Foreign equity funds	3,075,848,165	3,075,848,165	-	-	-
Equity	26,181,173,943	26,175,227,816	912,004	5,034,123	-
Real estate	3,298,006,160	-	-	148,966,790	3,149,039,370
Private equity	2,219,677,446	-	-	198,712,502	2,020,964,944
Absolute return funds	491,971	-	-	-	491,971
Options	121,392	121,392	-	-	-
Swaps	5,131,867	-	5,131,867	-	-
Investments measured at fair value	\$ 44,089,162,546	\$27,846,001,656	\$8,135,275,111	\$565,349,794	\$7,542,535,985
Investments measured at amortized cost	666,623,871				
Total	\$ 44,755,786,417	_			

	Investments measured at Net Asset Value (NAV)			
Year Ended December 31, 2019	Fair Value	Unfunded Commitments	Redemption Frequency (if currently eligible)	Redemption Notice Period
U.S. fixed income funds	\$ 1,796,365,990	\$-	Daily	0-2 Days
Foreign fixed income	575,673,710	-	Daily	30 Days
Commingled Fixed Income Funds Total	2,372,039,700	-		
Real estate	3,149,039,370	1,434,781,669	Quarterly, Not Eligible	30-60 days, N/A
Private equity	2,020,964,944	2,091,093,532	Quarterly, Not Eligible	60 days, N/A
Absolute return funds	491,971	-	Monthly, Quarterly	Notice in Place
Investments measured at NAV	\$7,542,535,985	\$3,525,875,201		

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 has 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. These are based upon the fair value of the underlying investments. Overall, IMRF's strategy for fixed income investments is to provide stable income and to diversify the equity market risk in the portfolio. The fixed income portfolio's objective is to achieve a total return that exceeds the total return of the Bloomberg Barclays U.S. Aggregate Bond Index net of fees. IMRF's investments in fixed income commingled funds essentially have the same objective.

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 has 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.

These are based upon the fair value of the underlying investments. Overall, IMRF's strategy for domestic equities is to earn an equity risk premium to enhance the long-term returns of the Fund. The domestic equity portfolio's objective is to achieve a total return that exceeds the total return of the Russell 3000 Index net of fees. IMRF's investments in equity commingled funds essentially have the same objective.

Real Estate Funds. This type includes open-ended commingled funds, commingled closed-ended funds and a commingled closed-ended fund of funds. The fair value of the investments in this type has 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. These are 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. IMRF strategy for investing in real estate is to provide diversification, inflation protection, and income generation in the investment portfolio. The real estate portfolio's objective is to achieve a total return that exceeds the return of the National Council of Real Estate Investment Fiduciaries (NCREIF) gross of fees Open End Diversified Core Equity (ODCE) Index over a rolling three year period. The global real estate program invests capital in private and public real estate debt and equity markets in order to achieve the investment objectives. The role of public real estate is to provide diversification, inflation protection and return enhancement. Private market real estate investments will be diversified among various return strategies including core, value-add and opportunistic in U.S. and non-U.S. markets.

Private Equity Funds. This type consists of private equity separate accounts with underlying partnerships, private equity fund of funds, direct limited partnership investments, and five hedge fund side pockets. The fair value of the investments in this type has been determined using the NAV per share (or equivalent) of the Funds' ownership interest in the partners' capital at the end of the period. These are 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. IMRF's strategy for alternative investments is to diversify the Fund's assets and enhance investment portfolio return through long-term capital appreciation. Private Equity is one component of this portfolio investment asset class can encompass different and distinct asset categories within U.S. and non-U.S. markets. The investment objective is to generate long-term returns in a diversified manner. It generally consists of limited partnerships 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, as such the alternative asset class is not structured to provide short term cash flow for the Fund.

I. EMPLOYEE RETIREMENT DEFINED BENEFIT PLAN

1.GENERAL INFORMATION ABOUT THE DEFINED BENEFIT PLAN

A. IMRF PLAN DESCRIPTION

As an employer, IMRF's defined benefit pension plan for regular employees provides retirement, disability benefits, post-retirement increases, and death benefits to plan members and their beneficiaries. IMRF is the administrator of a multi-employer public pension fund. A summary of IMRF's pension benefits is provided in the "Benefits Provided" section of this document. Details of all benefits are available from IMRF. Benefit provisions are established by statute and may only be changed by the General Assembly of the State of Illinois. IMRF issues a publicly available Comprehensive Annual Financial Report that includes financial statements, detailed information about the pension plan's fiduciary net position, and required supplementary information. The report is available for download at www. imrf.org.

B. BENEFITS PROVIDED

IMRF has three benefit plans. The vast majority of IMRF members participate in the Regular Plan (RP). The Sheriff's Law Enforcement Personnel (SLEP) plan is for sheriffs, deputy sheriffs, and selected police chiefs. Counties could adopt the Elected County Official (ECO) plan for officials elected prior to August 8, 2011 (the ECO plan was closed to new participants after that date).

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All three IMRF benefit plans have two tiers. Employees hired before January 1, 2011, are eligible for Tier 1 benefits. Tier 1 employees are vested for pension benefits when they have at least eight years of qualifying service credit. Tier 1 employees who retire at age 55 (at reduced benefits) or after age 60 (at full benefits) with eight years of service are entitled to an annual retirement benefit, payable monthly for life, in an amount equal to 1-2/3% of the final rate of earnings for the first 15 years of service credit, plus 2% for each year of service credit after 15 years to a maximum of 75% of their final rate of earnings. Final rate of earnings is the highest total earnings during any consecutive 48 months within the last ten years of service, divided by 48. Under Tier 1, the pension is increased by 3% of the original amount on January 1 every year after retirement.

Employees hired on or after January 1, 2011, are eligible for Tier 2 benefits. For Tier 2 employees, pension benefits vest after ten years of service. Participating employees who retire at age 62 (at reduced benefits) or after age 67 (at full benefits) with ten years of service are entitled to an annual retirement benefit, payable monthly for life, in an amount equal to 1-2/3% of the final rate of earnings for the first 15 years of service credit, plus 2% for each year of service credit after 15 years to a maximum of 75% of their final rate of earnings. Final rate of earnings is the highest total earnings during any 96 consecutive months within the last ten years of service, divided by 96. Under Tier 2, the pension is increased on January 1 every year after retirement, upon reaching age 67, by the lesser of:

- 3% of the original pension amount, or
- 1/2 of the increase in the Consumer Price Index of the original pension amount.

C. EMPLOYEES COVERED BY BENEFIT TERMS

As of December 31, 2020 and December 31, 2019 the following employees were covered by the benefit terms:

	2020	2019
Retirees and Beneficiaries currently receiving benefits	178	173
Inactive Plan Members entitled to but not yet receiving benefits	66	65
Active Plan Members	214	211
Total	458	449

D. CONTRIBUTIONS

As set by statute, the IMRF's Regular Plan Members are required to contribute 4.5% of their annual covered salary. The statute requires employers to contribute the amount necessary, in addition to member contributions, to finance the retirement coverage of its own employees. IMRF's annual contribution rate for calendar years 2020 and 2019 was 10.67% and 8.72% respectively. For the fiscal year ended December 31, 2020 and December 31, 2019, IMRF contributed \$1,943,590 and \$1,394,822 respectively to the plan. IMRF also contributes for disability benefits, death benefits, and supplemental retirement benefits, all of which are pooled at the IMRF level. Contribution rates for disability and death benefits are set by IMRF's Board of Trustees, while the supplemental retirement benefits rate is set by statute.

2. NET PENSION LIABILITY

IMRF's net pension liability was measured as of December 31, 2020 and December 31, 2019. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date.

A. ACTUARIAL ASSUMPTIONS

The following are the methods and assumptions used to determine total pension liability at December 31, 2020 and December 31, 2019:

Actuarial Cost Method	Entry-Age Normal	
Asset Valuation Method	Fair Value of Assets	
Inflation Rate	2.25% (2.5% as of December 31, 2019)	
Salary Increases	2.89% to 13.75% (3.39% to 14.25% as of December 31, 2019), including inflation	
Investment Rate of Return	7.25%	
Retirement Age	Experience-based table of rates, specific to the type of eligibility condition, last updated for the 2020 valuation pursuant to an experience study from years 2017 to 2019 (last updated for the 2017 valuation pursuant to an experience study from years 2014 to 2016 as of December 31, 2019)	
Mortality		
Non-Disabled Retirees	Pub-2010, Amount-Weighted, below-median income, General, Retiree, Male (adjust- ed 106%) and Female (adjusted 105%) tables, and future mortality improvements projected using scale MP-2020 were used. (The IMRF-specific rates for Mortality were 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 as of December 31, 2019)	

Pub-2010, Amount-Weighted, below-median income, General, Disabled Retiree, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2020. (Mortality for disabled retirees, an IMRF-specific mortality **Disabled Retirees** 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 as of December 31, 2019). Pub-2010, Amount-Weighted, below-median income, General, Employee, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2020. (Mortality, for active members, an IMRF-specific mortality table **Active Members** 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 as of December 31, 2019)

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense, and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return to the target asset allocation percentage and adding expected inflation. The target allocation and best estimates of geometric real rates of return for each major asset class are summarized in the following table as of December 31, 2020 and December 31, 2019.

	2020		2019	
	Portfolio Target Percentage	Long-Term Expected Real Rate of Return	Portfolio Target Percentage	Long-Term Expected Real Rate of Return
Domestic Equity	37%	5.00%	37%	5.75%
International Equity	18%	6.00%	18%	6.50%
Fixed Income	28%	1.30%	28%	3.25%
Real Estate	9%	6.20%	9%	5.20%
Alternative Investments	7%	2.85-6.95%	7%	3.60%-7.60%
Cash Equivalents	1%	0.70%	1%	1.85%
Total	100%		100%	

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3. SINGLE DISCOUNT RATE

A Single Discount Rate of 7.25% was used to measure the total pension liability. The projection of cash flow used to determine this Single Discount Rate assumed that the plan members' contributions will be made at the current contribution rate, and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. The Single Discount Rate reflects:

- 1. The long-term expected rate of return on pension plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits), and
- 2. The tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating (which is published by the Federal Reserve) as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of the most recent valuation, the expected rate of return on plan investments is 7.25%, which resulted in a single discount rate is 7.25% as of both December 31, 2020 and December 31, 2019.

4. CHANGES IN THE NET PENSION LIABILITY

	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(A)	(B)	(A)-(B)
Balances at December 31, 2018	\$88,665,351	\$75,380,202	\$13,285,149
Changes for 2019			
Service Cost	1,513,237	-	1,513,237
Interest on the Total Pension Liability	6,323,492	-	6,323,492
Changes of Benefit Terms	-	-	-
Differences Between Expected and Actual Experience of the Total Pension Liability	2,443,448	-	2,443,448
Changes of Assumptions	-	-	-
Contributions - Employer	-	1,461,295	(1,461,295)
Contributions - Employees	-	734,433	(734,433)
Net Investment Income	-	14,073,185	(14,073,185)
Benefit Payments, including Refunds of Employee Contributions	(4,402,776)	(4,402,776)	-
Other (Net Transfer)	-	1,176,751	(1,176,751)
Net Changes	5,877,401	13,042,888	(7,165,487)
Balances at December 31, 2019	\$94,542,752	\$88,423,090	\$6,119,662
Changes for 2020			
Service Cost	1,607,047	-	1,607,047
Interest on the Total Pension Liability	6,736,777	-	6,736,777
Changes of Benefit Terms	-	-	-
Differences Between Expected and Actual Experience of the Total Pension Liability	2,020,379	-	2,020,379
Changes of Assumptions	(759,061)	-	(759,061)
Contributions - Employer		1,977,839	(1,977,839)
Contributions - Employees	-	811,431	(811,431)
Net Investment Income	-	12,683,764	(12,683,764)
Benefit Payments, including Refunds of Employee Contributions	(4,850,421)	(4,850,421)	-
Other (Net Transfer)	-	(106,927)	106,927
Net Changes	4,754,721	10,515,686	(5,760,965)
Balances at December 31, 2020	\$99,297,473	\$98,938,776	\$358,697

IMRF as an employer, first implemented GASB 68 in fiscal year 2019. The cumulative effect of the change in accounting policy has been reclassed in the schedule above to the balance at December 31, 2018.

A. SENSITIVITY OF THE NET PENSION LIABILITY/(ASSET) TO CHANGES IN THE DISCOUNT RATE

The following presents the plan's net pension liability, calculated using a Single Discount Rate of 7.25%, as well as what the plan's net pension liability would be if it were calculated using a Single Discount Rate that is 1% lower or 1% higher:

	December 31, 2020			
	Current Single Discount Rate Assumption			
	1% Decrease (6.25%)	Current Rate (7.25%)	1% Increase (8.25%)	
Total Pension Liability	\$ 110,845,546	\$ 99,297,473	\$ 89,951,694	
Plan Fiduciary Net Position	98,938,776	98,938,776	98,938,776	
Net Pension Liability/(Asset)	\$ 11,906,770	\$ 358,697	\$ (8,987,082)	

	December 31, 2019			
	Current Single Discount Rate Assumption			
	1% Decrease (6.25%) Current Rate (7.25%) 1% Increase (8.25			
Total Pension Liability	\$ 105,897,938	\$ 94,542,752	\$ 85,120,256	
Plan Fiduciary Net Position	88,423,090	88,423,090	88,423,090	
Net Pension Liability/(Asset)	\$ 17,474,848	\$ 6,119,662	\$ (3,302,834)	

5. PENSION EXPENSE, DEFERRED OUTFLOWS OF RESOURCES, AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS

For the year ended December 31, 2020 and December 31, 2019, IMRF recognized pension expense of \$84,163 and \$1,540,670 respectively. At December 31, 2020 and December 31, 2019, IMRF reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	As of December 31, 2020		As of December 31, 2019		
	Deferred Outflows Deferred Inflows of Resources of Resources		Deferred Outflows of Resources	Deferred Inflows of Resources	
Deferred Amounts to be Recognized in Pension Expense in Future Periods					
Differences between expected and actual experience	\$3,369,323	\$-	\$2,650,593	\$-	
Changes of assumptions	963,086	1,169,174	1,440,033	1,112,441	
Net difference between projected and actual earnings on pension plan investments	-	7,590,017	-	3,537,678	
Total	\$4,332,409	\$8,759,191	\$4,090,626	\$4,650,119	

As of December 31, 2020 and December 31, 2019 the amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future periods as follows:

	As of December 31, 2020
	Net Deferred Outflows of Resources
2021	\$(1,408,718)
2022	383,221
2023	(2,327,328)
2024	(1,073,957)
2025	-
Thereafter	-
Total	\$(4,426,782)

	As of December 31, 2019
	Net Deferred Outflows of Resources
2020	\$(218,974)
2021	(404,616)
2022	1,387,323
2023	(1,323,226)
2024	-
Thereafter	-
Total	\$(559,493)



J. POST-EMPLOYMENT BENEFITS OTHER THAN PENSIONS (OPEB) 1. GENERAL INFORMATION ABOUT THE OPEB PLAN

A. 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. The plan is set up as a pay as you go plan. As such, there are no assets accumulated in a trust that meet the criteria in paragraph 4 of GASB Statement No. 75.

B. BENEFITS PROVIDED

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. 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. 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. The amount of the subsidy varies based upon the retiree's years of service with IMRF and are as follows:

Years of Service	IMRF Percent	Retiree Percent
Less than 10	0.0%	100.0%
10-14	20.0	80.0
15-19	27.5	72.5
20	35.0	65.0
21	36.5	63.5
22	38.0	62.0
23	39.5	60.5
24	41.0	59.0
25	42.5	57.5
26	44.0	56.0
27	45.5	54.5
28	47.0	53.0
29	48.5	51.5
30 and up	50.0	50.0

C. EMPLOYEES COVERED BY THE BENEFIT TERMS

The following employees were covered by the benefit terms at December 31, 2020 and 2019:

	2020	2019
Inactive employees or beneficiaries currently receiving benefits	24	23
Inactive employees entitled to but not yet receiving benefits	0	0
Active employees	212	209
Total	236	232

2. TOTAL OPEB LIABILITY

IMRF's total OPEB liability of \$2,353,042 and \$2,147,099 was measured as of December 31, 2020 and 2019, respectively, and was determined by an actuarial valuation as of those dates. The amount is included in the Accrued Expense on the Statement of Fiduciary Net Position.

The total OPEB liability in the December 31, 2020 and December 31, 2019 actuarial valuations was determined using the following actuarial assumptions and other inputs. These were applied to all periods included in the measurement unless otherwise specified.

Actuarial Cost Method	Entry-Age Normal
Discount Rate	2020 - 2.00% 2019 - 2.75% 2018 - 3.71%
Price Inflation	2.50%
Wage Inflation	3.25%
Salary Increases	3.39% to 10.35%, includes wage inflation
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition. Based on the experience study covering the three year period ending December 31, 2016, as conducted for the Illinois Municipal Retirement System.
Mortality	
Active members*	IMRF specific mortality rates with 2-dimensional, fully generational improvements using MP-2017 (base year 2015) Mortality Improvement Scale.
Retirees*	IMRF specific mortality rates with 2-dimensional, fully generational improvements using MP-2017 (base year 2015) Mortality Improvement Scale.
Health Care Trend Rates	Initial trend of 8.25% gradually decreasing to an ultimate trend rate of 3.50% in year 10
Excise Tax	At the end of 2019, a full repeal of the "Cadillac" tax was signed into law.
Aging Factors	Based on the 2013 SOA Study "Health Care Costs - From Birth to Death"

*Based on the experience study covering the three year period ending December 31, 2019 as conducted for the Illinois Municipal Retirement Fund.

For plans that have no assets, the discount rate used is the same as the tax-exempt municipal bond rate based on an index of 20 year general obligation bonds with an average credit rating of AA as of the measurement date. For these valuations the Fidelity 20 Year Municipal GO AA Index was used.

3. CHANGES IN THE TOTAL OPEB LIABILITY

	2020	2019
Total OPEB Liability – Beginning of the Year	\$ 2,147,099	\$ 1,961,967
Service Cost	117,971	101,836
Interest on the Total OPEB Liability	58,602	72,003
Changes of Benefit Terms	-	-
Differences Between Expected and Actual Experience	(30,919)	(10,076)
Changes in Assumptions	210,501	165,579
Benefit Payments	(150,212)	(144,210)
Net Changes	205,943	185,132
Total OPEB Liability – End of the Year	\$ 2,353,042	\$ 2,147,099

Changes in assumptions for 2020 and 2019 reflect a change in the discount rate from 3.71% in 2018 to 2.75% in 2019 to 2.00% in 2020.

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The following presents the total OPEB liability of IMRF, as well as what the total OPEB Liability would be if it were calculated using a discount rate that is plus/minus one percentage point from the current discount rate:

	Total OPEB Liability					
	Current Single Discount Rate					
	1% Decrease Assumptions		otions	1% Increase		
	Rate	Amount	Rate	Amount	Rate	Amount
2020	1.00%	\$2,479,336	2.00%	\$2,353,042	3.00%	\$2,226,562
2019	1.75%	\$2,257,945	2.75%	\$2,147,099	3.75%	\$2,035,753

B. SENSITIVITY OF THE TOTAL OPEB LIABILITY TO CHANGES IN THE HEALTH-CARE COST TREND RATES

The following presents the total OPEB liability of IMRF, as well as what the total OPEB Liability would be if it were calculated using health-care cost trend rates that are plus/minus one percentage point from the current healthcare cost trend rates:

	Total OPEB Liability				
	Current Health Care Cost				
	1% Decrease	Trend Rate Assumption	1% Increase		
2020	\$2,137,925	\$2,353,042	\$2,600,021		
2019	\$1,959,123	\$2,147,099	\$2,362,025		

4. OPEB EXPENSE AND DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES RELATED TO OPEB

For the years ended December 31, 2020 and December 31, 2019, IMRF recognized OPEB expense of \$165,610 and \$143,082, respectively. At December 31, 2020 and December 31, 2019, IMRF reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources

	December	· 31, 2020	December 31, 2019			
	Deferred Outflows of Resources Of Resources				Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$-	\$ 399,866	\$ -	\$435,234		
Changes in assumptions or other inputs	390,081	-	234,904	-		
Total	\$390,081	\$399,866	\$234,904	\$435,234		

As of December 31, 2020 and 2019, the amounts reported as deferred outflows and inflows of resources related to OPEB will be recognized in OPEB expense as follows:

(200, 330)

	As of Decmber 31, 2020		As of Decmber 31, 2
	Net Deferred Outflows of Resources		Net Deferred Outflov Resources
2021	\$ (10,963)	2020	\$ (30,757)
2022	(10,963)	2021	(30,757)
2023	(10,963)	2022	(30,757)
2024	(10,963)	2023	(30,757)
2025	(10,963)	2024	(30,757)
Thereafter	45,030	Thereafter	(46,545)
Total	\$ (9,785)	 Total	\$ (200,330)

K. 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 2020, retirement reserves exceeded the present value of expected retirement benefits for all employers combined by \$1,971,793,281. In 2019, the present value of expected retirement benefits exceeded the retirement reserves combined for all employers by \$2,307,925,029.

These reserves are explained in the Illinois Pension Code, Section 7-202 through 208.

	2020	2019
Member Contribution Reserve		
Balance at December 31	\$ 7,590,709,546	\$ 7,372,122,859
Annuity Reserve		
Balance at December 31	\$ 27,251,813,875	\$ 25,719,545,459
Employer Reserves		
Retirement contribution reserve	15,288,652,827	11,858,393,017
Earnings and experience reserve	420,791,897	77,903,787
Supplemental retirement benefit reserve	1,262,007	1,698,731
Death benefit reserve	9,780,975	11,876,041
Disability benefit reserve	8,911,320	8,436,345
Balance at December 31	\$ 15,729,399,026	\$ 11,958,307,921

L. OTHER NOTES

1. 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, 2020			
	Beginning Balance	Additions	Deletions	Ending Balance
Capital Assets				
Leasehold improvements	\$ 1,046,557	\$ 217,893	\$-	\$ 1,264,450
Furniture and equipment	13,112,226	1,762,317	(265,799)	14,608,744
Software	13,364,359	-	-	13,364,359
Total in service	27,523,142	1,980,210	(265,799)	29,237,553
Software under development	27,874,500	12,460,089	-	40,334,588
Total ending balance	55,397,642	14,440,299	(265,799)	69,572,141
Accumulated Depreciation & Amortization				
Leasehold improvements	725,327	113,550	-	838,877
Furniture and equipment	8,943,017	2,460,345	(257,173)	11,146,189
Software	9,346,696	-	-	9,346,696
Ending balance	19,015,040	2,573,895	(257,173)	21,331,762
Capital Assets, net	\$ 36,382,602	\$ 11,866,404	\$ (8,626)	\$48,240,379

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	Year ended December 31, 2019			
	Beginning Balance	Additions	Deletions	Ending Balance
Capital Assets				
Leasehold improvements	\$ 907,169	\$ 139,388	\$-	\$ 1,046,557
Furniture and equipment	12,749,545	485,294	(122,613)	13,112,226
Software	13,359,154	5,205	-	13,364,359
Total in service	27,015,868	629,887	(122,613)	27,523,142
Software under development	13,748,560	14,125,939	-	27,874,500
Total ending balance	40,764,428	14,755,826	(122,613)	55,397,642
Accumulated Depreciation & Amortization				
Leasehold improvements	656,671	68,656	-	725,327
Furniture and equipment	8,139,365	921,165	(117,513)	8,943,017
Software	8,034,360	1,312,336	-	9,346,696
Ending balance	16,830,396	2,302,157	(117,513)	19,015,040
Capital Assets, net	\$ 23,934,032	\$12,453,669	\$ (5,100)	\$36,382,602

2. PREPAID EXPENSES

	2020	2019
Prepaid administrative expenses	\$ 2,555,459	\$ 2,001,479
January 1 benefits charged to bank account in December	186,746,535	175,191,984
Balance at December 31	\$ 189,301,994	\$ 177,193,463

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, 2020, a liability existed for accumulated annual leave calculated at the employee's December 31, 2020 pay rate in the amount of \$1,258,600. 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 90 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, 2020, a liability existed for accumulated and accrued sick leave, calculated at the employee's December 31, 2020, and December 31, 2019, respectively, also includes an accrual for IMRF employer contributions and payroll taxes. These amounts are reflected in 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. In 2020, a 2-year extension was agreed upon expanding the lease term to December 31, 2025. The lease extension 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 2020 and 2019 was \$1,031,258 and \$1,002,456, 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 2020 and 2019 was \$65,049 and \$64,088, respectively.

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

	•
2021	\$ 1,169,060
2022	1,203,391
2023	1,232,435
2024	1,169,312
2025	1,186,660

5. RISK MANAGEMENT

IMRF carries commercial, business, fiduciary liability, cyber, 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; 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.



FINANCIAL

REQUIRED SUPPLEMENTARY INFORMATION*

* Unaudited; see accompanying Independent Auditor's Report

SCHEDULE OF CHANGES IN THE NET PENSION

LIABILITY AND RELATED RATIOS (Last 7 calendar years)

Calendar Year Ended December 31,	2020	2019
Total Pension Liability		
Service Cost	\$1,607,047	\$1,513,237
Interest on the Total Pension Liability	6,736,777	6,323,492
Changes of Benefit Terms	-	-
Differences Between Expected and Actual Experience of the Total Pension Liability	2,020,379	2,443,448
Changes of Assumptions	(759,061)	-
Benefit Payments, including Refunds of Employee Contributions	(4,850,421)	(4,402,776)
Net Change in Total Pension Liability	4,754,721	5,877,401
Total Pension Liability - Beginning	94,542,752	88,665,351
Total Pension Liability - Ending (A)	\$99,297,473	\$94,542,752
Plan Fiduciary Net Position		
Contributions - Employer	\$1,977,839	\$1,461,295
Contributions - Employees	811,431	734,433
Net Investment Income	12,683,764	14,073,185
Benefit Payments, including Refunds of Employee Contributions	(4,850,421)	(4,402,776)
Other (Net Transfers)	(106,927)	1,176,751
Net Change in Plan Fiduciary Net Position	10,515,686	13,042,888
Plan Fiduciary Net Position - Beginning	88,423,090	75,380,202
Plan Fiduciary Net Position - Ending (B)	\$98,938,776	\$88,423,090
Net Pension Liability - Ending (A) - (B)	\$358,697	\$6,119,662

NOTES TO SCHEDULE

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, information is presented for those years for which information is available.

IMRF as an employer, first implemented GASB 68 in fiscal year 2019. The cumulative effect of the change equals the ending balances as of December 31, 2018 and can also be found in IMRF's 2019 Annual Report. To provide the reader additional information, this schedule is presented to show actual year-to-year changes and trends in the amounts listed.

2018	2017	2016	2015	2014
\$1,457,827	\$1,482,033	\$1,479,003	\$1,365,350	\$1,470,549
6,062,850	5,957,587	5,639,112	5,296,918	4,811,508
-	-	-	-	-
701,372	271,862	701,699	1,259,500	809,085
2,380,154	(2,506,327)	(288,716)	185,566	2,582,349
(4,091,876)	(3,487,205)	(3,689,282)	(3,098,540)	(3,010,388)
6,510,327	1,717,950	3,841,816	5,008,794	6,663,103
82,155,024	80,437,074	76,595,258	71,586,464	64,923,361
\$88,665,351	\$82,155,024	\$80,437,074	\$76,595,258	\$71,586,464
\$1,727,695	\$1,633,408	\$1,618,248	\$1,525,536	\$1,464,867
703,059	671,827	682,515	640,313	569,699
(4,294,135)	12,369,122	4,560,348	333,287	3,852,275
(4,091,876)	(3,487,205)	(3,689,282)	(3,098,540)	(3,010,388)
1,073,349	(1,129,485)	423,297	85,045	607,268
(4,881,908)	10,057,667	3,595,126	(514,359)	3,483,721
80,262,110	70,204,443	66,609,317	67,123,676	63,639,955
\$75,380,202	\$80,262,110	\$70,204,443	\$66,609,317	\$67,123,676

NOTES TO SCHEDULE CONTINUED

Changes in assumptions:

- For 2014, changes are primarily from adopting an IMRF specific mortality tables with fully generational projection scale MP-2014 (base year 2014) developed from the RP-2014 mortality tables.
- For 2015, changes are primarily from a change in the calculated single discount rate from 7.49% in 2014 to 7.47% in 2015.
- For 2016, changes are primarily from a change in the calculated single discount rate from 7.47% in 2015 to 7.50% in 2016.
- For 2017, changes are primarily from adopting an IMRF specific mortality tables with fully generational projection scale MP-2017 (base year 2015) developed from the RP-2014 mortality tables.
- For 2018, the assumed investment rate of return was lowered from 7.50% to 7.25%.
- For 2020, changes are primarily from adopting the Pub-2010, amount weighted, general mortality tables for retirees and active members.



SCHEDULE OF EMPLOYER CONTRIBUTIONS

Calendar Year	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Valuation Payroll	Actual Contribution as a Percentage of Covered Valuation Payroll
2011	\$ 1,336,652	\$ 1,329,143	\$ 7,509	\$ 11,955,742	11.12%
2012	1,359,252	1,410,864	(51,612)	11,860,837	11.90
2013	1,511,513	1,493,946	17,567	12,471,233	11.98
2014	1,456,059	1,464,867	(8,808)	12,772,451	11.47
2015	1,509,919	1,525,536	(15,617)	13,676,803	11.15
2016	1,609,368	1,618,248	(8,880)	14,459,727	11.19
2017	1,613,882	1,633,408	(19,526)	14,929,525	10.94
2018	1,692,334	1,727,695	(35,361)	15,370,885	11.24
2019	1,423,164	1,461,295	(38,131)	16,320,688	8.95
2020	1,923,982	1,977,839	(53,857)	18,031,700	10.97

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.

Annual Money-weighted Rate of Returns, Net of Investment Expenses								
2020	2019	2018	2017	2016	2015	2014	2013	2012
15.20%	19.82%	(4.25)%	15.69%	7.81%	0.50%	6.19%	20.15%	13.18%

(Ten year trend not available)

SCHEDULE OF CHANGES IN THE TOTAL OPEB LIABILITY AND RELATED RATIOS

Total OPEB Liability	2020	2019	2018	2017
Service Cost	\$ 117,971	\$ 101,836	\$ 119,612	\$ 112,513
Interest on the Total OPEB Liability	58,602	72,003	74,519	84,042
Changes of Benefit Terms	-	-	-	-
Differences Between Expected and Actual Experience	(30,919)	(10,076)	(393,995)	(174,577)
Changes of Assumptions	210,501	165,579	23,037	103,110
Health Insurance Subsidy Payments *	(150,212)	(144,210)	(105,440)	(95,870)
Net Change in the Total OPEB Liability	205,943	185,132	(282,267)	29,218
Total OPEB Liability – Beginning	2,147,099	1,961,967	2,244,234	2,215,016
Total OPEB Liability – Ending	\$ 2,353,042	\$ 2,147,099	\$ 1,961,967	\$ 2,244,234
Covered Employee Payroll	\$17,523,905	\$17,067,031	\$15,549,200	\$15,627,422
Total OPEB Liability as a Percentage of Covered Employee Payroll	13.43%	12.58%	12.62%	14.36%

(Ten year trend information not available due to implementation of GASB Statement No. 75 in 2018. Historical information is not available prior to fiscal year 2017.)

* Includes an adjustment for any implicit rate subsidy present in the pre-65 rates.

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS USED IN THE CALCULATION OF THE 2020 CONTRIBUTION RATE*

Valuation Date	
Notes	Actuarially determined contribution rates are calculated as of December 31 each year, which is 12 months prior to the beginning of the fiscal year in which contributions are reported.
Methods and Assumptions Use	d to Determine 2020 Contribution Rates:
Actuarial Cost Method:	Aggregate entry age normal
Amortization Method:	Level percentage of payroll, closed
Remaining Amortization Period:	23-year closed period
Asset Valuation Method:	5-year smoothed market; 20% corridor
Wage Growth:	3.25%
Price Inflation:	2.50%
Salary Increases:	3.35% to 14.25%, including inflation
Investment Rate of Return:	7.25%
Retirement Age:	Experience-based table of rates that are specific to the type of eligibility condition; last updated for the 2017 valuation pursuant to an experience study of the period 2014 to 2016.
Mortality:	 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 Disabled Retirees Mortality Table, applying the same adjustments that were applied for non-disabled lives.
Other Information	
Benefit Changes:	None.

* Based on Valuation Assumptions used in the December 31, 2018, actuarial valuation; note two year lag between valuation and rate setting.



SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS USED IN THE CALCULATION OF THE 2019 CONTRIBUTION RATE*

Valuation Date

IMRF

Notes	Actuarially determined contribution rates are calculated as of December 31 each year, which is 12 months prior to the beginning of the fiscal year in which contributions are reported.
Methods and Assumptions Use	ed to Determine 2019 Contribution Rates:
Actuarial Cost Method:	Aggregate entry age normal
Amortization Method:	Level percentage of payroll, closed
Remaining Amortization Period:	24-year closed period
Asset Valuation Method:	5-year smoothed market; 20% corridor
Wage Growth:	3.25%
Price Inflation:	2.50%
Salary Increases:	3.35% to 14.25%, including inflation
Investment Rate of Return:	7.50%
Retirement Age:	Experience-based table of rates that are specific to the type of eligibility condition; last updated for the 2017 valuation pursuant to an experience study of the period 2014 to 2016.
	For non-disabled retirees, an IMRF specific mortality table was used with fully genera- tional projection scale MP-2017 (base year 2015). The IMRF Specific rates were devel- oped from the RP-2014 Blue Collar Healthy Annuitant Mortality Table with adjustments to match current IMRF experience.
Mortality:	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
Other Information	
Benefit Changes:	None.

* Based on Valuation Assumptions used in the December 31, 2017, actuarial valuation; note two year lag between valuation and rate setting.

SCHEDULE OF CHANGES IN THE TOTAL OPEB LIABILITY AND RELATED RATIOS

CHANGES OF ASSUMPTIONS

Changes of assumptions and other inputs reflect the effects of changes in the discount rate each period. The following are the discount rates used in each period:

Discount Rate							
2020 2019 2018 2017 2016							
2.00%	2.75%	3.17%	3.31%	3.78%			

SUPPLEMENTARY INFORMATION

Schedule of Administrative Expenses	2020 2		
Personnel services	\$ 20,744,122	\$ 27,106,753	
Supplies	393,004	462,255	
Professional services	2,034,800	1,708,415	
Occupancy and utilities	2,082,698	2,198,607	
Postage and delivery	682,333	1,169,142	
Equipment service and rental	1,606,103	1,368,194	
Expendable equipment	345,843	384,747	
Miscellaneous	1,317,033	1,673,273	
Depreciation	2,571,019	2,302,157	
Total	\$ 31,776,955	\$ 38,373,543	

Schedule of Payments for Professional Services	20	20	2	2019
Actuary	\$	668,189	\$	609,637
External auditor		346,790		343,497
Modernization consulting		655,744		99,479
Compensation and benefit consultants		68,105		72,754
Internal auditing		158,239		109,361
Medical consultant		28,144		45,997
Legal services		3,057		30,894
Other consulting		38,275		159,740
Legislative lobbying consultant		-		75,213
IT consultants		47,312		137,130
Hearing officer		7,173		21,022
Tax consultant		10,521		2,426
Public relations consultant		3,251		1,265
Total	\$	2,034,800	\$	1,708,415

Schedule of Investment Expenses	2020 20			2019
Investment manager fees	\$	156,162,145	\$	139,699,546
Equity Internal Management expenses		791,808		342,481
Master trustee fees		280,000		280,000
Investment consultants		854,676		1,143,502
Investment information service providers		890,730		213,893
Investment legal fees		172,199		224,806
Tax preparation fees		8,085		39,740
Miscellaneous		26,074		98,396
Total	\$	159,185,717	\$	142,042,364

A schedule of investment-related fees can be found in the Investments section.



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UTILIZE DIGITAL PLATFORMS TO IMPROVE CUSTOMER SERVICE



IMRF



IMRF Webinars

Debuted in a virtual format for the first time in 2020. Our members and Authorized Agents can now attend our workshops from anywhere they can login to the internet.



INVESTMENTS

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Wilshire

APRIL 27, 2021

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

Subject: Calendar Year 2020 Investment Performance

Dear Trustees and Mr. Executive Director,

2020 will likely go down as one of the most consequential years of many of our lives and one that will forever influence our individual perspectives and economic considerations. With the COVID-19 global pandemic prevailing as the monumental historical event of 2020, the monetary and fiscal actions prompted are likely to be the dominant driver of economic and market conditions over the coming decade(s).

The separation between economic and market outcomes during 2020 can be attributed to the unprecedented levels of monetary stimulus unleashed to dampen the economic impacts from pandemic-induced shutdowns. First, the Federal Reserve quickly supported liquidity access by returning its Fed Funds Discount Rate to zero in early 2020, helping to bolster future growth prospects in the market. Secondly, and arguably more notable, is the pace at which the Fed used its balance sheet to support financial assets during 2020. The Fed grew its balance sheet to approximately \$7.4 trillion in 2020, having added approximately \$3.2 trillion in support during the year.

The good news for investors, given this combination of a sharp decline in interest rates and unpresented monetary stimulus, is that capital markets enjoyed relatively attractive returns for the year. The U.S. equity market, as represented by the Russell 3000 Index, returned +20.9% during the year. The international equity market, as measured by the MSCI ACWI ex-U.S. Index, was also up strong during 2020, returning +10.7%. Within fixed income, the declining rate environment lifted bond prices as the Bloomberg U.S. Aggregate Index returned +7.5% for the year.

The Illinois Municipal Retirement Fund ("IMRF") ended calendar year 2020 at \$49.9 billion, up for the year by approximately 5.2 billion, net of benefit payments and fund expenses.

The IMRF Total Fund returned +14.8% net of fees during 2020, outperforming the Total Fund Benchmark, which returned +13.2% for the year. Strong investment manager outperformance within the U.S. Equity, International Equity and Real Estate Portfolios were the largest contributors to relative outperformance for the year.

On a gross of fees basis, the IMRF Total Fund ranked at the 14th Percentile in the InvestmentMetrics All Public Plans with AUM Greater than \$1 Billion Universe. Over the trailing three- and five-years, the IMRF Total Fund ranked at the 16th Percentile and 15th Percentile, respectively.

HEADQUARTERS

1299 Ocean Avenue, Suite 700 Santa Monica, CA 90401

Wilshire

The IMRF U.S. Equity Portfolio returned +21.9% net of fees during 2020, outperforming the Russell 3000 Index, which returned +20.9%. The U.S. Equity Portfolio ranked at the 21^{st} Percentile relative to peers in 2020.

Within International Equity, the IMRF Portfolio, which combines developed and emerging markets, and a dedicated allocation to small cap equities outside of the U.S., returned +13.1% during the year, outperforming the MSCI ACWI ex-U.S. Index, which returned +10.7%. Relative to peers the IMRF International Equity Portfolio ranked at the 26^{th} Percentile over the one-year.

IMRF's dedicated allocations to credit were among the largest contributors to relative outperformance for the Fixed Income Portfolio in 2020. The IMRF Fixed Income Portfolio, which includes Core Fixed Income, Emerging Markets Debt, High Yield and Bank Loans, returned +7.8%, outperforming the Bloomberg U.S. Aggregate Index which returned +7.5%. The Fixed Income Portfolio's one-year return ranked at the 73rd Percentile relative to peers in 2020.

Sincerely,

Cal

Calvin Born Jr. Assistant Vice President



INVESTMENTS



February 11, 2021

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, 2020 through December 31, 2020. Also, a statement of assets together with their fair value was provided, showing the properties held as of December 31, 2020. 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:

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

THE NORTHERN TRUST COMPANY

By

Kimberly A. Miller Senior Vice President

The Northern Trust Company

50 South La Salle Street Chicago, Illinois 60603 312-630-6000

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INVESTMENT CONSULTANTS

Master Trustee

The Northern Trust Company Kim Miller, Senior Vice President Chicago, Illinois

Performance Evaluation

Wilshire Associates Incorporated Rose Dean, Managing Director, Wilshire Consulting

Ali Kazemi, Managing Director, Wilshire Consulting Santa Monica, California

Investment Consultant

Wilshire Associates Incorporated Rose Dean, Managing Director, Wilshire Consulting

Ali Kazemi, Managing Director, Wilshire Consulting Santa Monica, California

Investment Managers

Abbott Capital Management, LLC New York, New York

ABRY Partners Boston, Massachusetts

AEW Capital Management, L.P. Boston, Massachusetts

Almanac Realty Investors New York, New York

Ares Management, LLC London, England

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 Baring Private Equity Asia Central, Hong Kong

Barings Capital Management Charlotte, North Carolina

Baring's L.L.C. 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 Global Asset Management Chicago, Illinois & Miami, Florida

BNY Mellon Boston, Massachusetts

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

ChrysCapital Maharashtra, India

Clearlake Capital Group Santa Monica, California

Cohen & Steers Capital Management, Inc. New York, New York

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

GlobeFlex Capital, L.P. San Diego, California

Goldman Sachs New York, New York

GTIS Partners New York, New York

Hancock Natural Resource Group, Inc. Boston, Massachusetts

HarbourVest Boston, Massachusetts

Harpoon Ventures Coronado, California



INVESTMENTS

INVESTMENT CONSULTANTS (CONTINUED)

H.I.G. Capital Miami, Florida

ICV Partners New York, New York

IK Investment Partners London, United Kingdom

Inflexion Private Equity Partners, LLP London, England

Invesco Real Estate Dallas, Texas

Investment Counselors of Maryland, LLC Baltimore, Maryland

JLC Chicago, Illinois

JP Morgan New York, New York

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 Mayfield Fund Menlo Park, California

Mondrian Investment Partners Limited London, England

Muller & Monroe Asset Management, LLC Chicago, Illinois

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

Partners Group Zug, Switzerland

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

Starwood Capital Group Greenwich, Connecticut

TA Associates Realty Boston, Massachusetts

Templeton Investment Counsel, LLC Fort Lauderdale, Florida

The Sterling Group Houston, Texas The Vistria Group Chicago, Illinois

Torchlight Investors New York, New York

True North Maharashtra, India

Valor Equity Partners Chicago, Illinois

Versant Venture Management LLC Menlo Park, California

Vista Equity Partners, LLC Austin, Texas

Waud Capital Partners Chicago, Illinois

Western Asset Management Company Pasadena, California

William Blair & Company Chicago, Illinois

Xponance, Inc. Durham, North Carolina

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 7.25%.
- 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 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) 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 proxy access shall be voted in favor of proposals where shareholder access to the director nomination process and to the company's proxy statement are allowed. 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 longterm benefits of all shareowners. Proxies related to board diversity shall be voted in favor of proposals allowing shareholders to increase diversity in the boardroom. Proxies related to equal opportunity shall be voted in favor of proposals requesting a company to disclose its diversity policies or initiatives and disclosure of a company's comprehensive workforce diversity data. 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. Proxies related to political expenditures shall be voted in favor of proposals that require board approval and disclosure of all political expenditures. Proxies related to social, political, and environmental issues shall be generally supported when proposals are seeking greater disclosure of a company's environment, social and

INVESTMENTS



sustainability risks, and practices. In keeping with the Board's fiduciary duty to act solely in the economic interest of the Fund, IMRF recognizes many laudable social and political issues come before the shareowners for a vote. 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 fair 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 fair 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) and Global Depository Receipts (GDRs) 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 fair 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 fair value.
- 4. Sector exposure in the portfolio shall not exceed the higher of 25% or two times the benchmark weighting at fair value.
- 5. Country exposure in the portfolio shall not exceed the higher of 25% or two times the benchmark weighting at fair 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. Managers are not permitted to utilize over-the-counter derivatives for hedging and/or speculative purposes.

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 fair value.
- 4. Generally, no more than 30% of an investment manager's assets at fair 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 80-120% of the index for mandates benchmarked against the Bloomberg Barclays U.S. Aggregate Bond Index or the ICE BofA Merrill Lynch High Yield Cash Pay Index.

- 7. The use of swaps, exchange-traded financial futures, exchange-traded options on financial futures, and over-thecounter 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 passthrough 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 50% with a minimum of 40%.
- 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. 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.

INVESTMENTS

IMRF...

RETURNS BY ASSET CLASS (Periods ending December 31)

						Annualized		
	2020	2019	2018	2017	2016	3 Yrs	5 Yrs	10 Yrs
Total Fund Time - Weig	ghted Retur	ns						
IMRF - Gross of Fees	14.98%	19.77%	(4.25)%	15.96%	8.00%	9.67%	10.57%	9.18%
IMRF - Net of Fees	14.79%	19.57%	(4.41)%	15.73%	7.77%	9.48%	10.36%	8.95%
CPI (Inflation)	1.36%	2.29%	1.91%	2.11%	2.07%	1.85%	1.95%	1.74%
Equities - U.S.								
IMRF - Gross of Fees	22.07%	29.23%	(6.08)%	19.83%	12.62%	14.00%	14.87%	13.42%
IMRF - Net of Fees	21.86%	29.00%	(6.26)%	19.60%	12.35%	13.80%	14.64%	13.17%
Russell 3000	20.89%	31.02%	(5.24)%	21.13%	12.74%	14.49%	15.43%	13.79%
Russell 2000	19.96%	25.52%	(11.01)%	14.65%	21.31%	10.25%	13.26%	11.20%
Equities - Internationa	l							
IMRF - Gross of Fees	13.52%	23.76%	(14.16)%	27.91%	3.54%	6.45%	9.84%	6.71%
IMRF - Net of Fees	13.08%	23.39%	(14.41)%	27.53%	3.21%	6.10%	9.47%	6.37%
MSCI ACWI Ex-U.S.	10.65%	21.51%	(14.20)%	27.19%	4.50%	4.88%	8.93%	4.92%
MSCI EAFE	7.82%	22.01%	(13.79)%	25.03%	1.00%	4.28%	7.45%	5.51%
Fixed Income								
IMRF - Gross of Fees	7.87%	9.50%	(0.28)%	4.80%	4.85%	5.62%	5.31%	4.69%
IMRF - Net of Fees	7.75%	9.37%	(0.41)%	4.67%	4.71%	5.49%	5.17%	4.54%
Bloomberg Aggregate	7.51%	8.72%	0.01%	3.54%	2.65%	5.34%	4.44%	3.84%
Bloomberg Government/Credit	8.93%	9.71%	(0.42)%	4.00%	3.05%	5.97%	4.98%	4.19%
Merrill Lynch High Yield	6.21%	14.40%	(2.26)%	7.48%	17.34%	5.90%	8.41%	6.61%
Real Estate								
IMRF - Net of Fees	4.16%	9.78%	8.36%	9.10%	8.97%	7.40%	8.23%	10.24%
Real Estate Benchmark	0.34%	4.39%	7.36%	6.66%	7.79%	3.99%	5.27%	9.07%
Alternative Investments								
IMRF - Gross of Fees	12.31%	9.48%	17.32%	12.15%	5.43%	12.99%	11.24%	9.78%
IMRF - Net of Fees	12.27%	9.43%	17.14%	11.97%	5.11%	12.90%	11.08%	9.54%
Cash & Cash Equivalen	its							
IMRF	2.56%	3.59%	2.36%	1.67%	0.63%	2.84%	2.16%	1.18%
U.S. Treasury Bills	0.67%	2.28%	1.87%	0.86%	0.33%	1.61%	1.18%	0.62%

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: Investment Consultants

SCHEDULE I

Investment Portfolio Summary (In millions of dollars)

	As of Decer	nber 31, 2020	As of December 31, 2019		
	Fair Value	Percent of Total Fair Value	Fair Value	Percent of Total Fair Value	
Fixed Income					
Government & Agencies	\$ 3,170.2	6.3%	\$ 3,823.8	8.5%	
Corporate	3,632.1	7.2	3,619.7	8.1	
Index Funds	3,890.5	7.8	3,605.5	8.1	
Foreign	1,362.5	2.7	1,335.6	3.0	
Total Fixed Income	12,055.3	24.0	12,384.6	27.7	
Stocks					
U.S. Common & Preferred	16,379.7	32.6	13,911.5	31.1	
U.S. Stock Funds	4,069.4	8.1	3,874.4	8.6	
Foreign Common & Preferred	6,692.1	13.3	5,319.4	11.9	
Foreign Stock Funds	3,567.3	7.1	3,075.8	6.9	
Total Stocks	30,708.5	61.1	26,181.1	58.5	
Real Estate	3,565.7	7.1	3,298.0	7.3	
Private Equity Investments	3,209.3	6.4	2,220.2	5.0	
Short-Term Investments	734.8	1.4	671.9	1.5	
Total Portfolio	\$ 50,273.6	100.0%	\$ 44,755.8	100.0%	

INVESTMENTS

IMRF...

SCHEDULE II Asset Allocation (Last five years)

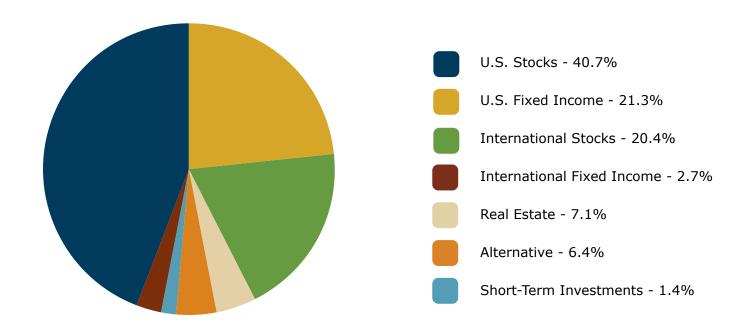
	Fair Value as a Percent of Portfolio						
	2020	2019	2018	2017	2016		
Fixed Income							
U.S. Government & Agencies	6.3%	8.5%	8.9%	7.5%	8.9%		
Corporate	7.2	8.1	8.5	7.2	7.7		
Index Fund	7.8	8.1	8.6	8.1	8.1		
Foreign	2.7	3.0	3.5	3.4	2.8		
Total Fixed Income	24.0	27.7	29.5	26.2	27.5		
Stocks							
U.S. Common & Preferred	32.6	31.1	29.1	28.8	29.2		
U.S. Stock Funds	8.1	8.6	10.6	13.9	14.2		
Foreign Common & Preferred	13.3	11.9	11.0	12.5	10.4		
Foreign Stock Funds	7.1	6.9	7.0	7.6	7.3		
Total Stocks	61.1	58.5	57.7	62.8	61.1		
Real Estate	7.1	7.3	7.1	6.2	6.3		
Private Equity Investments	6.4	5.0	4.0	3.2	3.1		
Short-Term Investments	1.4	1.5	1.7	1.6	2.0		
Total Portfolio	100.0%	100.0%	100.0%	100.0%	100.0%		

Locally funded, financially sound.

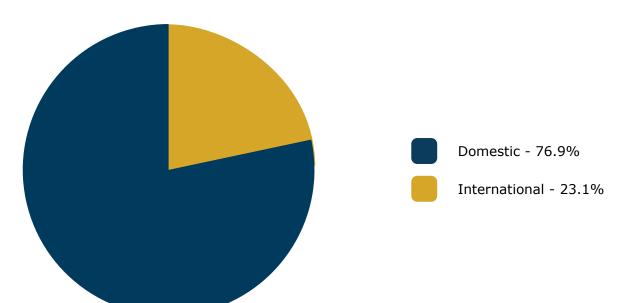
ANNUAL COMPREHENSIVE FINANCIAL REPOR

INVESTMENT PORTFOLIO (AS OF DECEMBER 31, 2020)

ALLOCATION BY ASSET CLASS



TOTAL INVESTMENTS BY REGION





INVESTMENTS

TEN LARGEST FIXED INCOME INVESTMENT HOLDINGS

As of December 31, 2020 (Excludes commingled funds and short-term investments)

Investment Income Holdings	Fair Value	Percent of Total Invested Market	
U.S. Treasury Bonds 2.375% Due 5/15/2027	\$ 208,660,038	0.42%	
U.S. Treasury Notes 1.5% Due 2/15/2030	140,329,314	0.28	
U.S. Treasury Notes 2.875% Due 5/15/2028	112,008,530	0.22	
U.S. Treasury Notes 2.375% Due 8/15/2024	80,208,568	0.16	
U.S. Treasury Notes 2.625% Due 2/15/2029	67,735,911	0.14	
Federal Home Loan Bank Floater 0.322% Due 10/2/2021	65,882,064	0.13	
U.S. Treasury Bonds 0.25% Due 08/31/2025	59,941,406	0.12	
U.S. Treasury Bonds 4.75% Due 2/15/2037	53,192,812	0.11	
U.S. Treasury Notes 2.375% Due 5/15/2029	53,259,023	0.11	
Bank America Corp. Note 3.974% Due 2/7/2030	50,848,531	0.10	
	\$ 892,066,197	1.79%	

TEN LARGEST EQUITY INVESTMENT HOLDINGS (Excludes commingled funds)

Equity Investment Holdings	Fair Value	Percent of Total Invested Market	
Apple, Inc.	\$ 690,25	1,920	1.38%
Amazon, Inc.	641,09	7,358	1.28
Microsoft, Inc.	578,66	7,000	1.16
Facebook, Inc.	352,54	7,125	0.71
Visa, Inc.	328,09	5,875	0.66
Netflix, Inc.	310,17	1,920	0.62
Sea, Ltd	302,34	6,998	0.61
Square, Inc.	240,56	8,592	0.48
Servicenow, Inc.	235,85	1,549	0.47
Adobe, Inc	214,03	1,855	0.43
Total	\$ 3,893,630	0,192	7.80%

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

SCHEDULE OF 2020 DOMESTIC BROKERAGE COMMISSIONS (In order of commission received)

Broker Name	Total Shares	Commission	Per Share
Loop Capital Markets, LLC	17,737,558.00	\$ 380,162.10	\$ 0.021
The Northern Trust Company	27,167,698.00	203,821.28	0.008
Blaylock Robert Van, LLC	6,943,000.00	201,490.13	0.029
Rbc Capital Markets, LLC	8,040,438.00	178,423.55	0.022
Wells Fargo Bank Minnesota NA	6,020,939.00	165,192.65	0.027
CL King	5,461,218.00	155,585.15	0.028
Penserra Securities, LLC	5,600,316.00	148,705.76	0.027
North South Capital, LLC	4,531,583.00	132,008.09	0.029
Capital Institutional Services, Inc.	6,850,726.00	129,965.97	0.019
Robert W. Baird & Co., Inc.	3,428,525.00	104,445.47	0.030
Raymond James & Associates, Inc.	3,180,489.00	101,250.36	0.032
Cabrera Capital Markets, LLC	5,709,729.00	97,810.65	0.017
J.P. Morgan Securities, LLC	7,073,577.00	96,502.78	0.014
Drexel Hamilton, LLC	4,589,400.00	91,788.00	0.020
Keybanc Capital Markets, Inc.	2,654,287.00	91,043.30	0.034
Liquidnet, Inc.	4,402,681.00	88,280.79	0.020
Bank of America Corporation	2,908,042.00	77,006.31	0.026
Credit Suisse Securities (USA), LLC	7,871,692.00	76,943.23	0.010
Fidelity Capital Markets (Div. of NFSC)	4,587,163.00	75,195.78	0.016
Stephens, Inc.	2,167,911.00	74,966.22	0.035
Sanford C. Bernstein & Co., LLC	11,647,878.00	74,858.19	0.006
Barclays Bank, PLC UK	10,989,426.00	72,242.55	0.007
Stifel, Nicolaus & Company, Inc.	2,190,339.00	69,536.72	0.032
The Williams Capital Group LP	2,468,931.00	69,405.53	0.028
Morgan Stanley & Co., LLC	5,800,853.00	58,104.64	0.010
Pershing, LLC	2,879,648.00	57,498.01	0.020
Piper Jaffray & Co.	1,625,059.00	52,211.45	0.032
Citigroup Global Markets, Inc.	4,567,613.00	51,884.73	0.011
Jefferies, LLC	2,462,107.00	51,778.09	0.021
Oppenheimer & Co., Inc.	1,288,278.00	51,017.56	0.040
Other Brokers	197,327,621.10	1,567,634.14	0.008
TOTAL	380,174,725.10	\$ 4,846,759.18	\$ 0.013



INVESTMENTS

SCHEDULE OF 2020 INTERNATIONAL BROKERAGE COMMISSIONS (In order of commission received)

Broker Name	Total Shares	Commission	Per Share
BNY Convergex Execution Solutions	28,617,540.00	\$ 464,514.57	\$ 0.016
CLSA Singapore Pte Ltd.	22,818,423.00	142,735.32	0.006
Morgan Stanley and Co., LLC	25,222,934.00	123,710.27	0.005
UBS Ag London Branch	26,186,924.00	113,909.27	0.004
Instinet Europe Limited	19,555,503.00	112,407.96	0.006
Bank of America Corporation	17,312,582.00	108,289.87	0.006
Joh, Berenberg, Gossler and Co., KG	2,896,293.00	104,236.36	0.036
Goldman, Sachs and Co.	7,208,301.00	94,554.77	0.013
BNP Paribas Securities Services SA	4,274,127.00	89,394.18	0.021
Merrill Lynch International Limited	29,029,401.00	81,093.33	0.003
Kepler Capital Markets	6,115,067.00	75,654.21	0.012
North South Capital, LLC	8,383,080.00	68,590.05	0.008
J.P. Morgan Securities, PLC	16,620,751.00	63,256.27	0.004
Jefferies, LLC	11,627,929.00	63,249.34	0.005
Macquarie Bank Limited	26,221,439.00	58,189.71	0.002
Parel	5,590,623.00	49,834.53	0.009
Pershing Securities Limited	4,670,205.00	48,396.76	0.010
UBS AG	1,719,837.00	48,063.81	0.028
J.P. Morgan Securities (Asia Pacific)	32,140,981.00	46,539.46	0.001
CLSA Limited	54,017,536.00	46,354.16	0.001
Carnegie Investment Bank AB	446,041.00	45,272.48	0.101
Citigroup Global Markets Limited	11,618,883.00	44,864.68	0.004
Exane S.A.	9,429,883.00	42,716.58	0.005
Instinet Pacific Limited	98,104,923.00	39,572.90	0.000
Bank of America Merrill Lynch Securities	6,123,370.00	35,524.02	0.006
J.P. Morgan Securities, LLC	18,230,482.00	35,083.82	0.002
Numis Securities, Inc.	2,537,152.00	34,352.36	0.014
Piper, Jaffray and Hopwood	3,973,583.00	34,010.92	0.009
Daiwa Capital Markets America, Inc.	1,156,595.00	28,012.81	0.024
Winterflood Securities Limited	3,053,258.00	27,979.98	0.009
Other Brokers	441,889,233.07	970,626.81	0.002
TOTAL	946,792,879.07	\$ 3,340,991.56	\$ 0.004

SCHEDULE OF INVESTMENT FEES

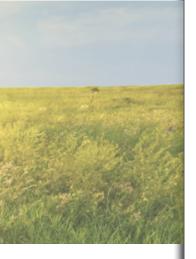
	2020 Fees	2020 Assets under management at year end (in thousands)*	Basis Points	2019 Fees	2019 Assets under management at year end (in thousands)*	Basis Points
Investment manager fees						
Fixed income managers	\$ 12,461,084	\$ 11,295,514	11	\$ 14,208,061	\$ 11,612,261	12
Stock managers**	29,274,744	16,707,834	18	29,925,997	16,218,450	18
International managers	38,543,597	15,903,675	24	30,732,199	11,779,943	26
Real estate managers	36,572,967	3,287,202	111	31,920,019	3,014,183	106
Alternative investment managers	40,101,561	3,098,597	129	33,255,751	2,190,536	152
Total	\$156,953,953	\$ 50,292,822		\$140,042,027	\$ 44,815,373	
Other investment fees						
Master trustee fees	\$ 280,000			\$ 280,000		
Investment consulting fees	854,676			1,143,502		
Total investment fees	158,088,629			141,465,529		
Non-fee investment expenses	1,097,088			576,835		
Total direct investment expenses	\$159,185,717			\$142,042,364		

Securities lending fees			
(Borrower rebates) and management fees	\$ (2,950,332)	\$ 2,599,296	

* Assets under management includes accrued investment income and unsettled trades.

** Includes \$791,808 and \$342,481 for 2020 and 2019, respectively in expenses related to IMRF's Equity Internal Management group.





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- 87. Funded Status and Funding Progress
- 88. Schedule of Funding Progress
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- 90. Schedule of Adds and Removals from Rolls
- **91.** Contribution Rates
- 92. Actuarial Balance Sheet
- 92. Analysis of Under Funded Liability
- 93. Derivation of Experience Gain (Loss)
- 94. Summary of Benefits





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March 25, 2021

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 2022 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, 2020, and issued on March 15, 2021. 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 Comprehensive Annual Financial Report 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 Comprehensive Annual Financial Report Schedule. Board of Trustees Illinois Municipal Retirement Fund March 25, 2021 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, 2020 valuations were based upon assumptions that were recommended in connection with a study of experience covering the 2017-2019 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 94.1% funded based upon the smoothed value of assets and 102.7% funded based upon fair 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, 2020 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.





ACTUARIAL

Board of Trustees Illinois Municipal Retirement Fund March 25, 2021 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 Comprehensive Annual Financial Report contains some, but not all, of the information in the valuation reports.

Mark Buis, Francois Pieterse and Laura Frankowiak 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,

Bri

Mark Buis, FSA, EA, FCA, MAAA

tenal

Francois Pieterse, ASA, FCA, MAAA

Laura Frankowiak, ASA, FCA, MAAA

MB/FP/LF:bd Enclosure



Illinois Municipal Retirement Fund Brief Summary of Actuarial Assumptions Used in 2020 Valuations (Adopted as of December 31, 2020, except as noted below)

Investment Return	7.25% per annum, compounded annually, net of expenses, including a price inflation component of 2.25%.
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, the Pub-2010, Amount-Weighted, below-median income, General, Retiree, Male (adjusted 106%) and Female (adjusted 105%) tables, and future mortality improvements projected using scale MP-2020. For disabled retirees, the Pub-2010, Amount-Weighted, below-median income, General, Disabled Retiree, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2020. For active members, the Pub-2010, Amount-Weighted, below-median income, General, Employee, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2020.
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 Disability		Pay Increase Next Year				
Age	Male	Female	Male Female		(5+ Yrs. of Service)		
20	0.04%	0.01%	0.00%	0.00%	5.25%		
30	0.07%	0.03%	0.00%	0.00%	4.77%		
40	0.12%	0.05%	0.01%	0.01%	3.73%		
50	0.20%	0.10%	0.03%	0.01%	3.23%		
60	0.49%	0.25%	0.06%	0.03%	2.89%		
65	0.69%	0.37%	0.06%	0.04%	2.85%		

	Sep	paration								
	Regula	ar			Retirement (Tier 1)					
	(8+ Yrs. S	erv.)	SLEP	Reduc	ed Early	Normal Un	Normal Unreduced		Service	
Age	Male	Female	(7+ Yrs.)	Male	Female	Male	Female	(< 32 Yrs.)	(32+ Yrs.)	
30	4.8%	7.7%	3.7%	-	-	-	-	-	-	
35	3.8%	5.9%	2.5%	-	-	-	-	-	-	
40	3.0%	4.6%	1.6%	-	-	-	-	-	-	
45	2.5%	3.8%	1.5%	-	-	-	-	-	-	
50	2.1%	3.2%	1.5%	-	-	-	-	30.0%	32.6%	
55	-	-	-	7.00%	6.05%	33.0%	29.5%	25.0%	32.6%	
60	-	-	-	-	-	13.0%	11.5%	21.0%	32.6%	
65	-	-	-	-	-	26.0%	27.0%	21.0%	32.6%	
70	-	-	-	-	-	26.0%	25.5%	100.0%	100.0%	

Sample Probabilities (for ages in 2020)									
	Annuitant Mortality								
	Healthy A	nnuitants	Disabled Annuitants						
Ages	Male	Female	Male	Female					
40	0.1285%	0.0569%	0.8146%	0.7258%					
50	0.7184%	0.4177%	1.5088%	1.4045%					
60	1.1993%	0.5926%	2.6150%	2.0712%					
70	2.0736%	1.1233%	3.6584%	2.5752%					
80	5.7587%	3.6165%	6.7581%	5.6561%					

ACTUARIAL

IMRF



As of December 31, 2020, the most recent actuarial valuation date, the plan on an aggregate basis was 94.1% funded on an actuarial basis. The actuarial accrued liability for benefits was \$48.9 billion, and the actuarial value of assets was \$46.0 billion, resulting in an unfunded actuarial accrued liability (UAAL) of \$2.9 billion. The covered payroll (annual payroll of active employees covered by the plan) was \$7.6 billion, and the ratio of the UAAL to the covered payroll was 38.4%.

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, 2020					
Actuarial cost method	. Entry age normal					
Amortization method	. Level percent of payroll for Regular and SLEP; level dollars for ECO					
Amortization period Taxing bodies: closed, 21 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	7.25%
Projected salary increases	2.89% to 13.75%
Assumed wage inflation rate	2.75%
Group size growth rate	0.00%
Assumed payroll growth rate	2.50%
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, the Pub-2010, Amount-Weighted, below-median income, General, Retiree, Male (adjusted 106%) and Female (adjusted 105%) tables, and future mortality improvements projected using scale MP-2020 were used. For disabled retirees, the Pub-2010, Amount-Weighted, below-median income, General, Disabled Retiree, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2020. For active members, the Pub-2010, Amount-Weighted, below-median income, General, Employee, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2020.

ANNUAL COMPREHENSIVE FINANCIAL REPORT

TABLE ISchedule of Aggregate Funding Progress (Last ten years)

	Aggregate	Actuarial Liabilities (A	AL)	Unfunded A	funded Actuarial Liabilities (UAL)			
Actuarial Valuation Date December 31			Actuarial Assets as a percent of AAL (b/a)	Total UAL (a-b)	Member Payroll (c)	UAL as a percent of Member Payroll (a-b)/c		
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		
2018*	45,354,110,653	40,829,952,193	90.0	4,524,158,460	7,321,479,593	61.8		
2019*	47,357,901,268	42,936,185,938	90.7	4,421,715,330	7,547,532,434	58.6		
2020*	48,922,948,739	46,017,438,373	94.1	2,905,510,366	7,568,181,773	38.4		

* After 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
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
2018	483,736,934	404,016,662	13,752,607	46,062,620	947,568,823	100
2019	422,913,805	297,062,029	12,780,691	47,393,173	780,149,698	100
2020	541,229,676	322,250,981	15,967,779	48,143,173	927,591,609	100



ACTUARIAL

TABLE III

Solvency Test (Last ten years)

	Aggreg	ate Actuarial Liabilitie		Actu	Portion of arial Liabili ered by Ass		
Calendar Year	Active Member Contributions (1) (2)		Active Members (Employer Financed Portion) (3)	Actuarial Assets	(1)	(2)	(3)
2011	\$5,417,822,062	\$13,388,018,799	\$12,156,974,567	\$25,711,287,584	100.0%	100.0%	56.8%
2012	5,705,336,025	14,482,560,758	12,415,347,316	27,491,809,785	100.0	100.0	58.8
2013	5,957,217,332	15,753,071,341	12,646,286,800	30,083,042,548	100.0	100.0	66.2
2014	6,262,110,058	17,885,026,667	13,318,010,887	32,700,208,537	100.0	100.0	64.2
2015	6,488,892,894	19,506,345,352	13,491,335,644	34,913,127,469	100.0	100.0	66.1
2016	6,714,120,028	21,085,519,077	13,559,071,297	36,773,397,527	100.0	100.0	66.2
2017	6,924,946,616	22,007,921,865	13,246,614,175	39,187,802,312	100.0	100.0	77.4
2018	7,141,414,323	24,106,296,051	14,106,400,279	40,829,952,193	100.0	100.0	67.9
2019	7,372,126,920	25,719,545,459	14,266,228,889	42,936,185,938	100.0	100.0	69.0
2020	7,590,754,155	27,251,813,875	14,080,380,709	46,017,438,373	100.0	100.0	79.4

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

TABLE IVParticipating 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
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
2018	7,321,479,593	2.7	41,476	2.2	176,523	47.8	10.3
2019	7,547,532,434	3.1	42,451	2.4	177,795	47.7	10.1
2020	7,568,181,773	0.3	44,353	4.5	170,637	47.8	10.4

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

Locally funded, financi	ally	sound.
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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
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
2018	9,540	163,529,915	4,537	18,936,746	133,261	2,112,500,534	15,852	3.3
2019	9,343	162,863,622	4,515	19,587,203	138,089	2,255,776,953	16,336	3.1
2020	9,581	173,020,256	5,341	25,816,764	142,329	2,402,980,445	16,883	3.3

Schedule of Disabilitants Added to and Removed from Rolls

	Adde	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
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
2018	1,655	23,316,183	1,704	23,483,662	723	8,121,546	11,233	4.6
2019	1,770	25,549,639	1,741	23,963,994	752	9,707,191	12,908	14.9
2020	1,443	22,985,609	1,501	24,322,209	694	8,370,591	12,061	(6.6)

ACTUARIAL



TABLE VI

Average Employer Contribution Rates (Last five years)

0							
Calendar Year	Normal Cost	Amortization of Unfunded Liability	Early Retirement Incentive (ERI) Liability	SLEP Enhancement Liability	Disability and Death	Supplemental Retirement Benefit	Total
Regular men	nbers						
2018	6.61%	3.63%	0.19%	n/a	0.19%	0.62%	11.24%
2019	5.61	2.47	0.19	n/a	0.17	0.62	9.06
2020	5.98	3.93	0.17	n/a	0.21	0.62	10.91
2021	5.86	3.74	0.16	n/a	0.24	0.62	10.62
2022	5.22	2.38	0.14	n/a	0.23	0.62	8.59
Sheriff's Law	v Enforcement I	Personnel (SLE	P) members				
2018	11.63	7.03	0.10	1.92%	0.19	0.62	21.49
2019	10.98	6.55	0.11	2.07	0.17	0.62	20.50
2020	11.94	9.62	0.09	2.00	0.21	0.62	24.48
2021	11.72	9.03	0.09	1.99	0.25	0.62	23.70
2022	10.05	6.86	0.05	1.99	0.24	0.62	19.81
Elected Cour	nty Official (ECC) members					
2018	16.85	65.03	0.00	n/a	0.22	0.62	82.72
2019	13.21	52.41	0.00	n/a	0.19	0.62	66.43
2020	13.79	58.02	0.00	n/a	0.23	0.62	72.66
2021	14.21	56.57	0.00	n/a	0.28	0.62	71.68
2022	13.26	47.21	0.00	n/a	0.28	0.62	61.37

TABLE VII
Participating Member Contribution Rates (Last ten years)

	Regular IMRF			Sheriff's Law Enforcement Personnel			Elected County Official				
Year	Normal	Survivor	Total	Normal	Survivor	SLEP	Total	Normal	Survivor	ECO	Total
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
2018	3.75	0.75	4.50	3.75	0.75	3.00	7.50	3.75	0.75	3.00	7.50
2019	3.75	0.75	4.50	3.75	0.75	3.00	7.50	3.75	0.75	3.00	7.50
2020	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				
	2020	2019			
Sources of Funds					
Actuarial value of assets	\$ 46,017,438,373	\$ 42,936,185,938			
Actuarial present value of future contributions					
Member	2,645,881,765	2,756,417,390			
Employer Normal Costs	2,996,072,204	3,527,198,587			
Under Funded Actuarial Accrued Liability	2,905,510,366	4,421,715,330			
Total Sources	\$ 54,564,902,708	\$ 53,641,517,245			
Uses of Funds					
Retired members and beneficiaries	\$27,251,813,875	\$ 25,719,545,459			
Inactive members	4,147,138,786	3,977,864,200			
Active members	22,813,825,291	23,656,174,347			
Voluntary additional members	333,160,284	267,207,484			
Death and disability benefits	18,964,472	20,725,755			
Total Uses	\$ 54,564,902,708	\$ 53,641,517,245			

ANALYSIS OF UNDERFUNDED LIABILITY

	December 31					
	2020	2019				
Underfunded liability beginning of year	\$ 4,421,715,330	\$	4,524,158,460			
Assumed net (payments) during year	(327,270,697)		(336,629,003)			
Assumed interest	308,849,181		326,641,691			
Expected underfunded liability	\$ 4,403,293,814	\$	4,514,171,148			
(Decrease) due to change in assumptions	\$ (357,008,491)	\$	-			
(Decrease) due to investment performance	(1,177,273,755)		(367,178,690)			
Decrease due to other sources	36,498,798		274,722,872			
Under funded liability end of year	\$ \$2,905,510,366	\$	4,421,715,330			

ACTUARIAL

IMRF

DERIVATION OF EXPERIENCE GAIN (LOSS)

	2020	2019
Type of Risk Area		
Risks Related to Assumptions (in millions)		
Economic Risk Areas		
Investment Return/(Loss)	\$ 1,177.3	\$ 367.2
Pay Increases	(27.0)	(45.1)
Demographic Risk Areas		
Service Retirements	(25.6)	(20.2)
Early Retirements	(6.6)	(7.4)
Vested Deferred Retirements	(23.7)	(18.2)
Death and Survivor Benefits	(2.3)	(10.3)
Disability Benefits	10.6	17.0
Terminated with Refund	15.6	32.4
Changes due to Experience Study (1)	357.0	0.0
Risks Not Related to Assumptions (2)	22.5	(222.9)
Total Gain (Loss) During Year	\$ 1,497.8	\$ 92.5

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% 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) Board of Trustees changed the discount rate effective January 1, 2019.
- (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 3,031 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 65% 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.

TIER 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.

ACTUARIAL

REFUNDS

IMRF

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 contributions if they have not attained the earliest eligible age for receiving a pension based on their plan rules. Vested members who have reached their eligible retirement age may choose to receive a refund if their pension would be less than \$100 per month or if the refund is rolled over 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

TIER 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 2021 will be \$116,740.42, and in 2020 it was \$115,928.92 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.

TIER 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

TIER 1

IMRF

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 "13th 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.



STATISTICAL

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STATISTICAL



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				
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				
2018	(1,747,217,132)	947,568,823	12.94%	413,901,691	13,850	(385,732,768)				
2019	7,517,792,605	780,149,698	10.34%	437,930,911	15,300	8,735,888,514				
2020	6,722,889,252	927,591,609	12.26%	449,724,661	12,925	8,100,218,447				

Calendar Administrative Benefits Refunds **Total Deductions** Year Expenses 2011 \$1,284,405,609 \$32,900,105 \$23,086,712 \$1,340,392,426 2012 1,389,815,471 34,142,193 24,508,053 1,448,465,717 2013 1,503,374,148 36,944,214 25,463,299 1,565,781,661 2014 1,626,821,250 39,191,090 1,692,443,992 26,431,652 2015 1,758,184,358 36,748,509 28,707,981 1,823,640,848 2016 1,902,139,898 37,690,098 38,702,237 1,978,532,233 2017 2,043,613,657 42,552,060 31,038,134 2,117,203,851 2018 2,194,961,403 48,028,752 2,275,203,323 32,213,168 2,347,237,088 51,372,047 38,373,543 2,436,982,678 2019 2020 2,494,317,158 52,178,126 31,776,955 2,578,272,239

Change in Fiduciary Net Position
\$ (304,827,736)
3,159,266,216
5,287,250,276
1,583,468,306
(353,967,434)
2,000,667,217
4,898,260,866
(2,660,936,091)
6,298,905,836
5,521,946,208

TABLE IX

Benefit Expense by Type (Last ten years)

	Death					
Calendar Year	Supplemental	Refund	Burial	Residual		
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	9,697,948	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		
2018	9,957,323	10,217,863	10,111,870	2,516,138		
2019	9,970,090	12,630,012	10,011,054	2,735,846		
2020	8,891,181	10,589,258	11,040,634	3,562,281		

		Annui	ities	Refu	inds		
Calendar Year	Retirement	Surviving Spouse	Beneficiary	Supplemental	Separation	Other	Total
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
2018	1,987,168,560	115,681,971	4,185,900	45,681,452	35,164,167	12,864,585	2,242,990,155
2019	2,126,647,074	124,331,675	4,720,509	47,311,252	33,672,230	17,699,817	2,398,609,135
2020	2,265,445,917	132,627,404	5,197,450	48,579,897	32,885,092	19,293,034	2,546,495,284

STATISTICAL

TABLE XNet Cash Flow from Contributions After Benefits (Last ten years)

Year	Employer Contributions	Member Contributions	Total Contributions	Total Benefit Payments	Net Cash Flow
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	1,666,012,340	(391,540,070)
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	393,747,860	1,297,229,891	2,086,165,717	(788,935,826)
2018	947,568,823	413,901,691	1,361,470,514	2,242,990,155	(881,519,641)
2019	780,149,698	437,930,911	1,218,080,609	2,398,609,135	(1,180,528,526)
2020	927,591,609	449,724,661	1,377,316,270	2,546,495,284	(1,169,179,014)

TABLE XI

IMRF...

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

Calendar Year	Annuity	Disability	Death	Refund	Total
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
2018	8,267	1,655	3795	11,111	24,828
2019	8,037	1,770	3793	10,954	24,554
2020	8,143	1,443	4067	10,068	23,721

TABLE XII

Number of Employees (Last ten years)

Calendar Year End	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Administration (1)	4	4	4	4	4	5	6	6	2	2
Benefits (2)	28	28	28	28	31	31	35	33	19	20
Communications	7	7	6	7	9	9	8	8	9	9
Customer Service (1)	-	-	-	-	-	-	-	-	1	1
Disability (2)	-	-	-	-	-	-	-	-	15	13
Field Services (3)	-	-	-	-	-	-	-	-	12	11
Finance	27	28	29	27	27	20	25	25	24	27
Human Resources	4	4	3	4	4	4	4	4	4	5
Information Services	34	34	35	33	34	32	40	43	41	43
Internal Audit	4	4	7	7	7	8	8	8	8	8
Investments	10	9	10	13	13	14	14	14	17	17
Legal (4)	4	4	4	5	5	5	5	6	8	8
Member Services (3)	26	28	30	33	35	37	38	40	28	29
Office Services (4)	22	22	21	19	19	19	19	19	18	18
Organizational Excellence (1)	-	-	-	-	-	-	-	-	3	3
Program Management (5)	6	4	5	5	6	6	-	-	-	-
Total	176	176	182	185	194	190	202	206	209	214

(1) The Customer Service and Organizational Excellence departments separated from Administration in 2019

(2) The Disability department separated from Benefits in 2019

(3) The Field Services department separated from Member Services in 2019

(4) The Procurement unit moved from Office Services to Legal in 2019

(5) The Program Management department merged with Information Systems in 2017

TABLE XIII

Number of Actively Participating Employers (Last ten years)

Calendar Year End	Cities	Villages	Counties	School Districts	Townships	Other	Total
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
2018	260	419	101	850	481	899	3,010
2019	261	420	101	850	481	912	3,025
2020	261	422	101	850	483	914	3,031



TABLE XIV

IMRF

Principal Participating Employers (Current year and ten years ago)

		2020			2011	
Employer	Active Members	Rank	Percentage of Total Active Members	Active Members	Rank	Percentage of Total Active Members
DuPage County	3,119	1	1.75%	3,043	1	1.72%
Will County	2,754	2	1.55	2,338	3	1.32
Lake County	2,588	3	1.46	2,553	2	1.45
Union School District 46	2,314	4	1.30	1,716	4	0.97
Rockford School District 205	1,667	5	0.94	1,513	6	0.86
Winnebago County	1,504	6	0.85	1,575	5	0.89
Township High School District 211	1,453	7	0.82	1,219	9	0.69
Kane County	1,424	8	0.80	1,304	8	0.74
McHenry County	1,302	9	0.73	1,330	7	0.75
Peoria School District 150	1,224	10	0.69	N/A*	N/A*	N/A*
Valley View CU SD 365U	N/A**	N/A**	N/A**	1,195	10	0.68

*In 2011, this entity did not rank in the Top Ten.

** In 2020, this entity did not rank in the Top Ten.

TABLE XVNumber of Actively Participating Members (Last ten years)

Calendar Year End	Male Participants	Female Participants	Total
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
2018	65,120	111,397	176,517
2019	65,543	112,266	177,809
2020	63,687	107,048	170,735

TABLE XVI

Calendar Year	Total Active Members	Under 1 Year	1 to 7 Years	8 to 14 Years	15 Years and Over	Percent Vested
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
2018	176,517	20,535	69,940	37,905	48,137	48.7
2019	177,809	20,633	73,257	36,395	47,524	47.2
2020	170,735	13,705	75,580	34,680	46,770	47.7

Participating Members' Length of Service (Last ten years)

TABLE XVII

Active Members by Age

	All Plans			Sheriff's Law Enforcement Personnel			Elected County Official		fficial
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
Under 20	242	224	466	1	-	1	-	-	-
20 to 29	8,006	10,310	18,316	513	73	586	-	-	-
30 to 39	12,976	18,073	31,049	1,072	163	1,235	-	-	-
40 to 49	14,005	24,867	38,872	1,210	209	1,419	8	4	12
50 to 54	8,032	16,157	24,189	417	56	473	9	4	13
55 to 59	8,699	17,474	26,173	168	38	206	9	9	18
60 to 69	10,006	18,108	28,114	123	15	138	13	8	21
70 and Over	1,721	1,835	3,556	7	1	8	3	1	4
Total	63,687	107,048	170,735	3,511	555	4,066	42	26	68

STATISTICAL

IMIRF. TABLE XVIII

Annuitants by Age

		Retirees		Su	viving Spou	Ises	Be	eneficiarie	s
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
Under 55	325	59	384	12	101	113	123	163	286
55 to 59	3,138	5,450	8,588	37	206	243	16	99	115
60 to 64	7,092	13,812	20,904	145	588	733	31	69	100
65 to 69	9,958	20,855	30,813	393	929	1,322	34	74	108
70 to 74	8,807	18,600	27,407	608	1,339	1,947	25	61	86
75 to 79	5,448	12,240	17,688	795	1,651	2,446	12	52	64
80 to 84	3,451	7,776	11,227	889	1,750	2,639	8	37	45
85 to 89	1,816	4,727	6,543	761	1,596	2,357	5	11	16
90 to 94	739	2,418	3,157	464	994	1,458	1	11	12
95 to 99	149	695	844	135	345	480	-	3	3
100 and over	12	98	110	21	69	90	1	-	1
Total	40,935	86,730	127,665	4,260	9,568	13,828	256	580	836

TABLE XIX

Average Initial Benefit Payment Amounts (Last ten years)

	Single Sum	n Payments	Recurring Payments			
Calendar Year	Separation Refunds	Lump Sum Death Benefit	Annual Disability (1)	Annual Retirement (2)		
2011	\$ 3,154	\$ 30,592	\$ 17,958	\$ 16,490		
2012	3,218	34,500	18,475	15,718		
2013	3,229	34,853	18,898	15,781		
2014	3,164	35,795	20,048	16,877		
2015	3,127	35,141	19,696	17,301		
2016	3,075	32,018	20,386	17,128		
2017	3,119	34,645	20,632	17,878		
2018	3,202	37,502	21,297	18,480		
2019	3,092	43,031	22,155	18,738		
2020	3,313	40,927	23,169	19,554		

(1) Prior to Social Security and workers' compensation offsets.

(2) Includes voluntary additional benefits.

TABLE XX

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

			Y	ears of Cree	dited Servio	:e		
	8-9	10-14	15-19	20-24	25-29	30-34	35+	Total
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	1,313	1,080	943	770	491	461	5,781
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
2018	,	,	,	,			,	
Avg Monthly Annuity	\$ 384	\$ 591	\$ 1,004	\$ 1,471	\$ 2,245	\$ 3,128	\$ 4,263	\$ 1,603
Avg Monthly FRE	\$ 2,713	\$ 2,966	\$ 3,428	\$ 3,826	\$ 4,615	\$ 5,386	\$ 6,007	\$ 3,913
Number of Retirees	561	1,232	1,305	1,204	786	594	549	6,231
2019	f	ŧ	f	f			f	
Avg Monthly Annuity	\$ 390	\$ 600	\$ 1,007	\$ 1,514	\$ 2,210	\$ 3,211	\$ 4,476	\$ 1,638
Avg Monthly FRE	\$ 2,739	\$ 2,981	\$ 3,457	\$ 3,930	\$ 4,577	\$ 5,535	\$ 6,300	\$ 3,987
Number of Retirees	447	1,267	1,226	1,140	803	613	481	5,977
2020		;	;	;	-		;	
Avg Monthly Annuity	\$ 388	\$ 638	\$ 1,000	\$ 1,522	\$ 2,212	\$ 3,149	\$ 4,540	\$ 1,733
Avg Monthly FRE	\$ 2,753	\$ 3,128	\$ 3,405	\$ 3,939	\$ 4,573	\$ 5,436	\$ 6,419	\$ 4,089
Number of Retirees	295	1,252	1,243	1,292	860	670	568	6,180

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.

STATISTICAL

TABLE XXI

IMRF

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

	15-19	20-24	25-29	30-34	35+	Total
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						
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
2018	,,		, ,	,	,	
Avg Monthly Annuity	\$-	\$ 4,092	\$ 5,025	\$ 5,706	\$ 6,995	\$ 4,851
Avg Monthly FRE	\$-	\$ 7,575	\$ 7,668	\$ 7,576	\$ 8,744	\$ 7,649
Number of Retirees	-	46	38	23	4	111
2019	· · · · · · · · · · · · · · · · · · ·		;			
Avg Monthly Annuity	\$-	\$ 4,443	\$ 6,085	\$ 6,674	\$ 5,921	\$ 5,662
Avg Monthly FRE	\$-	\$ 8,122	\$ 8,808	\$ 8,571	\$ 7,402	\$ 8,512
Number of Retirees	-	31	45	18	2	96
2020	,,		,			
Avg Monthly Annuity	\$ 2,145	\$ 3,903	\$ 5,447	\$ 6,767	\$ -	\$ 4,913
Avg Monthly FRE	\$ 5,722	\$ 7,322	\$ 8,123	\$ 8,702	\$-	\$ 7,824
Number of Retirees	1	57	47	19	- [124

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)

			<u> </u>	lears of Crec	lited <u>Service</u>	e		
	8-9	10-14	15-19	20-24	25-29	30-34	35+	Total
2011								
Avg Monthly Annuity	\$ 141	\$ 320	\$ 2,787	\$ 4,394	\$ 4,722	\$-	\$ -	\$ 2,279
Avg Monthly FRE	\$ 580	\$ 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	1	1	1				1	1
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
2018	1	1	1	,		,	1	1
Avg Monthly Annuity	\$ 635	\$ 2,701	\$ 3,295	\$ 4,126	\$ 6,215	\$ 5,565	\$12,608	\$ 4,414
Avg Monthly FRE	\$ 2,215	\$ 5,447	\$ 4,632	\$ 5,157	\$ 7,768	\$ 6,957	\$15,760	\$ 5,941
Number of Retirees	2	1	2	5	2	1	1	14
2019	:	1	1				:	1
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
2020								
Avg Monthly Annuity	\$-	\$ 4,372	\$-	\$ 1,641	\$ 4,284	\$-	\$-	\$ 2,611
Avg Monthly FRE	\$ -	\$ 9,775	\$-	\$ 2,052	\$ 5,355	\$-	\$-	\$ 4,495
Number of Retirees	-	2	1	3	1	-	-	7

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.

STATISTICAL

TABLE XXIII

IMRF.

Distribution of Current Annuitants by Pension Amount

	Retire Numb		Surv Numt		All Annuities Number of		
Monthly Pension Amount	Males	Females	Males	Females	Males	Females	
Under \$100	829	4,463	468	506	1,297	4,969	
\$100 to under \$250	1,965	10,293	1,132	1,419	3,097	11,712	
\$250 to under \$500	4,091	17,153	1,195	2,135	5,286	19,288	
\$500 to under \$750	3,906	12,865	641	1,435	4,547	14,300	
\$750 to under \$1,000	3,286	9,322	352	1,079	3,638	10,401	
\$1,000 to under \$2,000	9,119	19,485	401	2,073	9,520	21,558	
\$2,000 to under \$3,000	5,769	7,632	49	621	5,818	8,253	
\$3,000 to under \$4,000	4,267	3,105	18	191	4,285	3,296	
\$4,000 to under \$5,000	2,959	1,328	3	68	2,962	1,396	
\$5,000 to under \$6,000	1,911	575	1	26	1,912	601	
\$6,000 and over	2,833	509	-	15	2,833	524	
Total	40,935	86,730	4,260	9,568	45,195	96,298	

Note: Counts do not include disabilities.

TABLE XXIV Membership By Tier

		2020	
	Tier 1	Tier 2	Total
Annuitants/Beneficiaries			
Total Retirees	142,267	62	142,329

Active			
Vested	73,616	304	73,920
Non-Vested	14,433	82,382	96,815
Total	88,049	82,686	170,735
Inactive			
Vested	14,985	26	15,011
Non-Vested	67,209	47,559	114,768
Total	82,194	47,585	129,779
Active/Inactive			
Active/ Indetive			
Vested	88,601	330	88,931
	88,601 81,642	330 129,941	88,931 211,583
Vested			,
Vested Non-Vested	81,642	129,941	211,583

	2019	
Tier 1	Tier 2	Total
138,077	12	138,089

80,024	144	80,168
16,607	81,034	97,641
96,631	81,178	177,809
14,210	19	14,229
68,548	41,393	109,941
82,758	41,412	124,170
82,758	41,412	124,170
82,758 94,234	41,412 163	124,170 94,397
94,234	163	94,397
94,234 85,155	163 122,427	94,397 207,582

2020-2022 STRATEGIC PLAN

IMRF's Strategic Plan for 2020-2022 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.



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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