# 2021



# ILLINOIS MUNICIPAL RETIREMENT FUND

# ANNUAL COMPREHENSIVE FINANCIAL REPORT

For the years ended December 31, 2021 and December 31, 2020

Locally funded, financially sound.

# FOR THE YEARS ENDED DECEMBER 31, 2021 & DECEMBER 31, 2020

#### PREPARED BY

The Finance Department of the Illinois Municipal Retirement Fund

#### **OAK BROOK OFFICE**

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

## SPRINGFIELD REGIONAL COUNSELING CENTER

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

#### **CONTACT IMRF**

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

#### **Brian Collins**

Executive Director

# IMRF MISSION STATEMENT

To efficiently and impartially develop, implement, and administer programs that provide income protection to members and their beneficiaries on behalf of participating employers, in a prudent manner.

### **IMRF VALUES**

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

RESPECT EMPATHY ACCOUNTABILITY ACCURACY COURAGE HONESTY



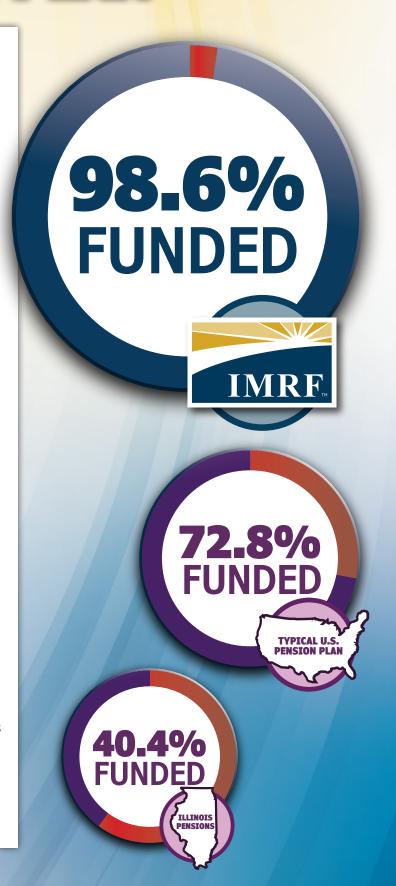
# IMRFIA SUSTAINABLE PENSION PLAN

IMRF began operating in 1941 with five original employers and a \$5,000 U.S. Treasury Bond. Eighty years later, the organization has grown to more than 3,000 employers and \$57 billion in assets. At the close of our fiscal year on December 31, 2021, IMRF stood 98.6% funded on an actuarial basis and was the only public pension in the nation to receive the U.S. Department of Commerce's prestigious Malcolm Baldrige National Quality Award.

What explains this organization's 80-year history of remarkable growth and striking success? These four Sustainable Success Factors are key contributors:

- Strategic Trustee Leadership
- Members and Employers Honoring Their Commitments
- Industry-leading Investment Management
- Tier 2 Reduces Costs

These Sustainable Success Factors supported IMRF over the last 80 years, and have prepared the fund for whatever challenges the future brings. Since the start of 2022, the COVID-19 Pandemic, surging inflation, and the war in Ukraine have injected volatility into the global financial markets and IMRF's investment portfolio. While these challenges are concerning, the organization has weathered numerous global health crises, multiple periods of economic turmoil, and many armed conflicts over the last eight decades. Supported by its Sustainable Success Factors, IMRF has always weathered the storm and gone on to continued success. The same will prove true as we navigate the uncertain period ahead.



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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.



NATALIE COPPER
2022 PRESIDENT
EMPLOYEE TRUSTEE
Current term ending Dec. 31, 2024
Dawes School in Evanston



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



PETER STEFAN
2022 SECRETARY
EMPLOYEE TRUSTEE
Current term ending Dec. 31, 2025
Village of Lake in the Hills



**DAVID MILLER EXECUTIVE TRUSTEE**Current term ending Dec. 31, 2026
North Shore Water Reclamation District



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



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



TRACIE MITCHELL EMPLOYEE TRUSTEE Current term ending Dec. 31, 2025 Central Illinois Regional Dispatch Center



**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* 



ANGELA MILLER-MAY
Chief Investment Officer



MARK NANNINI
Chief Financial Officer

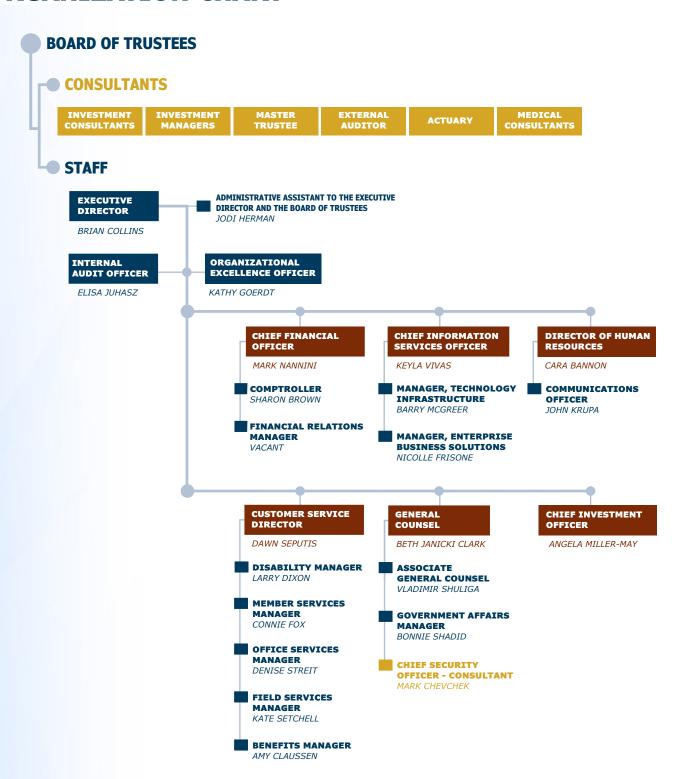


**DAWN SEPUTIS**Customer Service Director



**KEYLA VIVAS**Chief Information Services Officer

#### **ORGANIZATION CHART**



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

External Auditors Master Trustee Medical Consultants Adjudicators Actuary Gabriel, Roeder, The Northern Trust Managed Medical Review Ottosen, DiNolfo, Plante Moran Michelle Watterworth Smith & Company Kimberly Miller Organization (MMRO) Hasenbalg & Castaldo, LTD Mark Buis, F.S.A. Theresa Banka Senior Vice President Novi, Michigan Susan Davis Brunner, LLC Southfield, Michigan François Pieterse, A.S.A., Chicago, Illinois

F.C.A., M.A.A.A. Southfield, Michigan

#### **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 2020, IMRF received the Certificate of Achievement for Excellence in Financial Reporting for the 41st 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.



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Illinois Municipal Retirement Fund

For its Annual Comprehensive Financial Report for the Fiscal Year Ended

**December 31, 2020** 

Christophe P. Movill

Executive Director/CEO



www.imrf.org

May 27, 2022

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, 2021. 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 developing and evaluating IMRF's accounting system, we consider the adequacy of internal accounting controls. We design these controls to provide reasonable assurance regarding the safekeeping of assets and the reliability of financial records. Because the cost of internal control should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements.

IMRF's Internal Audit department is comprised of four full-time employees, including an Internal Audit Officer. The Internal Audit department uses a risk-based audit plan and detailed internal audit programs that encompass examination of internal controls and the Fund's financial transactions and records. IMRF engages an independent public accounting/technology consulting firm annually to review and test internal controls over our information systems. During 2021, the Employer Compliance unit was part of a reorganization. The unit, comprised of five full-time staff, now reports to Associate General Counsel in the Legal department.

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 2021 Financial Statements is included in this report. 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.

The Management Discussion and Analysis (MD&A) begins on page 21 of this Annual Report and 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.

#### 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 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 3,032 different employers, 172,310 participating members, 138,391 inactive (not receiving benefits) and 147,134 benefit recipients. The Illinois Pension Code requires IMRF to provide its financial statements to participating employers and to any participating member who requests them. These financial statements also appear on IMRF's website, www.imrf.org.

#### **ECONOMIC CONDITIONS**

#### SUMMARY OF FINANCIAL INFORMATION

The following table summarizes additions and deductions to the Fund's fiduciary net position for 2021 and 2020.

|            | 2021 (millions) | 2020 (millions) | Dollar Change<br>(millions) | Percent Change |
|------------|-----------------|-----------------|-----------------------------|----------------|
| Additions  | \$ 9,890.0      | \$ 8,100.2      | \$ 1,789.8                  | 22.1%          |
| Deductions | 2,761.9         | 2,578.3         | 183.6                       | 7.1%           |
| Net Change | \$ 7,128.1      | \$ 5,521.9      | \$ 1,606.2                  | 29.1%          |

The increase in Additions between 2021 and 2020 is primarily due to a \$1,726.3 million increase in investment income. The 2021 financial markets increased over 2020 markets boosted mostly from the rebound of the economy from COVID-19, consumer spending and the efforts to return to a new normal. The increase in Deductions is primarily due to increased benefit payment amounts and an increase in the number of benefit recipients from 142,329 to 147,134. 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, 2021 valuation, the aggregate actuarial value of assets was \$50.2 billion. The aggregate actuarial liability for all IMRF employers was \$50.9 billion. The aggregate actuarial funding ratio is currently 98.6% (an increase from the 2020 ratio of 94.1%). If the market value of assets is used (i.e., no actuarial smoothing), the aggregate funding ratio is 113.3% as of December 31, 2021, an increase from 103.4% as of December 31, 2020. 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, 2021, IMRF's market-based funding value change was higher than the actuarial funding value since there were \$7,023.9 million of unrecognized actuarial investment gains, which will be reflected in the 2022 through 2025 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. The annual assumed investment rate of return is 7.25%.

#### **INVESTMENTS**

The investment portfolio is a major contributor to the Fund. Year 2021 investment returns resulted in a gain of \$8.4 billion or 16.6%. Looking at it from a long-term perspective of 3, 5, and 10 years, the rates of return are 17.0%, 12.1%, and 10.7%, respectively. The 2021 investment gain represented 85.4% of the Plan Additions for the year. In the past five years—2017 through 2021—investment income represented the following percentage of additions to fiduciary net position:

| Year | Percentage of Additions |
|------|-------------------------|
| 2021 | 85.4%                   |
| 2020 | 83.0%                   |
| 2019 | 85.9%                   |
| 2018 | (452.8)%                |
| 2017 | 81.5%                   |

IMRF's primary goal is to optimize the long-term total return of the Fund's investments through a policy of diversification within a parameter of prudent risk, as measured on the total portfolio. Currently, the public markets portfolio is managed by 34 professional investment management firms handling 44 mandates. These firms make investment decisions under the Prudent Man Rule authorized by Article 1 of the Illinois Pension Code and by investment policy guidelines adopted by the Board of Trustees. The private markets portfolio is invested with 60 investment firms across 187 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.

Our Internal Equity Management team of three staff managed approximately \$3.6 billion in assets as of December 31, 2021.

The Board employs an Investment Consultant to assist staff in the development and evaluation of IMRF's strategic asset allocation, asset liability modeling study, and investment policy statements. The Investment Consultant also assists with the selection of investment management firms and in the monitoring and evaluation of investment manager performance. The Board of Trustees selected Wilshire Associates as the investment consultant in January 2020, that contract continued throughout 2021.

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

David Miller, who has served as Trustee since 2016, was elected to his second term as Executive Trustee. His second term will run from January 1, 2022, through December 31, 2026.

#### B. LEGISLATIVE ACTIVITY APPLICABLE TO IMRF (PASSED IN 2021)

Six bills that affect IMRF passed the General Assembly in 2021:

#### **Public Act 102-0097**

Creates an exemption to the competitive bid process for contracts for emerging managers through a Manager of Managers program. Also specifically allows for graduation of certain managers from the program for direct investment. Effective January 1, 2022.

#### **Public Act 102-0210**

In the provisions applicable to IMRF, moves the Tier 2 provisions for the regular plan from Article 1 to Article 7 and removes a requirement that the state Auditor General approve the Fund's audit firm. It also sets the age for the required minimum distribution to that included in the federal Internal Revenue Code and allows certain active members of the State Employees' Retirement System to transfer IMRF law enforcement service to that system. The provisions regarding moving the Tier 2 language and removing the review by the state Auditor General will be effective January 1, 2022. The provisions regarding the age for the required minimum distribution and the SERS transfers were effective July 30, 2021.

#### Public Act 102-0637

Adds the Firefighters' and Police Officers' Pension Investment Funds to the list of entities eligible to participate in IMRF for the purpose of allowing those funds' staffs to participate in IMRF. Effective August 27, 2021.

#### **Public Act 102-0113**

Allows active members of an Article 3 downstate police pension fund to transfer service earned in IMRF as a police officer, including SLEP service, to that fund (no provision to transfer service to IMRF). Allows those members to reinstate an IMRF refund to transfer the service. Effective July 23, 2021.

#### **Public Act 102-0603**

Prohibits trustees from being employed by that pension fund for one year after he or she is no longer a trustee, except for certain temporary appointments to a senior leader position. Applies to all Illinois public pension funds. Effective January 1, 2022.

#### **Public Act 102-0479**

Prohibits candidates who meet the criteria to serve as an Executive Trustee from serving as an Employee Trustee. Effective August 20, 2021.

#### C. SYSTEMS DEVELOPMENT

IMRF's major 2021 system development priorities focused on:

- Continued the Horizon Project system implementation, executing Phase 4 "Build and Deploy" for segment five.
- Upgraded all Horizon environments on site for the Horizon software implementation, including integration with external services and telephony components.
- Completed planned Disaster Recovery work to improve our ability to meet our Recovery Time Objectives goals
  including hardware to expand our Disaster Recovery storage capacity as we continue to modernize IMRF's Disaster
  Recovery technology infrastructure and implement our replication strategies.
- Made progress on the implementation of telephony enhancement tools to support IMRF's Customer Service Goals.

IMRF's major 2022 system development priorities will focus on:

- Continuing the Horizon Project system implementation, including the creation of last two new environments, and the completion of Phase 4 "Build and Deploy" for segment five. "Go Live" for Horizon 1.0 is planned for fourth quarter 2022.
- Disaster Recovery work continues to improve our ability to meet our Recovery Time Objectives goals using replication strategies. Creating and executing a Disaster Recovery drill for production using Horizon infrastructure and pension administration solution instead of Spectrum (mainframe) prior to "Go Live". Two major Disaster Recovery drills will be executed in 2022.
- Palo Alto Firewall appliance replacement and upgrade to meet IMRF needs for performance, capacity, and defense
  against cybersecurity threats. This is needed as we expand our digital footprint by increasing access through VPN,
  performing more video conference meetings, conduct webinars, broaden data replication technology to support an
  upgraded Disaster Recovery posture, and adapt to some vendors solely offering cloud-based services moving
  forward.
- Implementation of expanded Multifactor Authentication Access to further protect IMRF digital identities and increase our cyber defense posture against unauthorized access to critical identity connection endpoints.
- Application of telephony enhancements to support IMRF's Customer Service Goals.
- Upgrade our virtualization infrastructure version ahead of Horizon "Go Live".
- Replace end-of-support audio-visual components in three conference rooms located in both our Springfield and Oak Brook offices.

#### D. INVESTMENT ACTIVITIES

On February 11, 2022, IMRF staff and its consultant presented the 2022 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 February 11, 2022. The 2022 and 2021 asset allocation targets are listed in the table below:

| Asset Class             | 2022 Target | 2021 Target |
|-------------------------|-------------|-------------|
| U.S. equities           | 35.5%       | 39.0%       |
| International equities  | 18.0%       | 15.0%       |
| Fixed income            | 25.5%       | 25.0%       |
| Real estate             | 10.5%       | 10.0%       |
| Alternative investments | 9.5%        | 10.0%       |
| Short term              | 1.0%        | 1.0%        |

Major investment activities in 2021 through February 11, 2022, were as follows:

- The 2022 IMRF Investment Committee Charter and Statement of Investment Policy were revised by staff and approved by the Board.
- Additional commitments were made to seven follow-on funds of five existing real estate managers.
- Additional commitments were made to 14 follow-on funds of 10 existing private equity managers.
- Additional commitments were made to one follow-on fund of one existing private credit manager.
- New commitments were made to two funds of two new private equity firms.

- A Portfolio Rebalancing was implemented withdrawing approximately \$1,750 million from domestic equity and \$200 million from international equity rebalancing into \$1,100 million of fixed income and \$850 million of internally managed domestic equity.
- The NTGI MSCI EAFE Index Fund was converted into the NTGI MSCI ACWIXUS Index Fund.
- The Capital Markets Assumptions and 2022 Annual Asset Allocation Review were presented by staff and the
  consultant and were approved by the Board. This included changes to the strategic asset allocation targets and the
  policy benchmarks.

#### 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 2020 - 2022 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 2021. 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

At the February 11, 2022, Board of trustees meeting, the Board embarked on the process to prepare the 2023 - 2025 Strategic Plan.

# 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



Malcolm Baldrige National Quality Award

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 applied to MBNQA in April 2018, qualified for a site visit, and received a comprehensive feedback report. IMRF again applied 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 demonstrate 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.

#### 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 43 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 2021 and 2020 activity. We provided Employer Statements every month. We issued annuitant statements in February 2022, Active Member Statements in March 2022, and Inactive Member Statements in March 2022. We will include a summary of this Annual Report for members and annuitants in Fundamentals, IMRF's member newsletter. We will advise Authorized Agents in May 2022 that this report, as well as our Popular Annual Financial Report, is 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, 2020. IMRF has received a Certificate of Achievement from the GFOA for the last 41 consecutive years (fiscal years 1980-2020).

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, 2020.

IMRF received the GFOA Distinguished Budget Award for its 2021 budget. The Government Finance Officers Association of the United States and Canada (GFOA) awarded the Distinguished Budget Presentation Award for the seventh consecutive time to IMRF. The award is for a one-year period. IMRF has applied again for this prestigious award for the 2022 budget document.

In addition, GFOA awarded IMRF its prestigious "Triple Crown" Award for the second year in a row. This award recognizes governments that have received all three GFOA Certificate of Achievement for Excellence in Financial Reporting awards.

In 2021, 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 continued to deal with COVID 19 concerns and were still able to produce this report for the Board of Trustees and the 3,032 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.

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

Mark F. Nannini

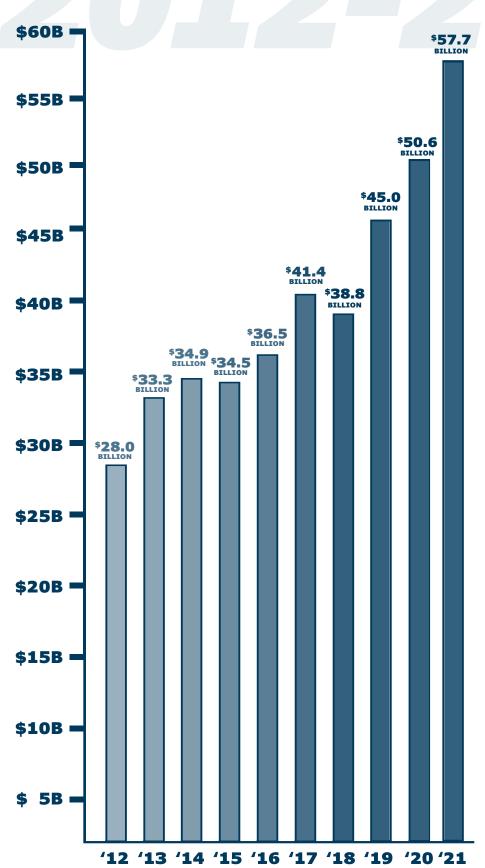
Moetet Houni

Respectfully submitted,

Brian Collins

Executive Director Chief Financial Officer

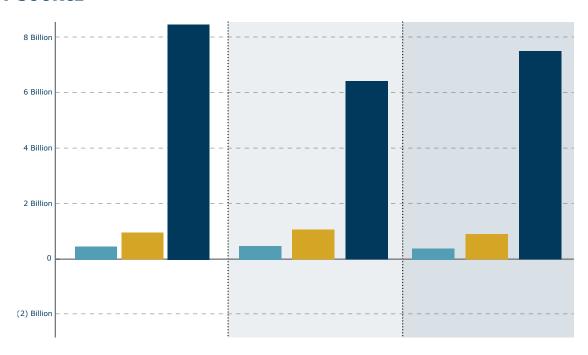
## IMRF FIDUCIARY NET POSITION



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

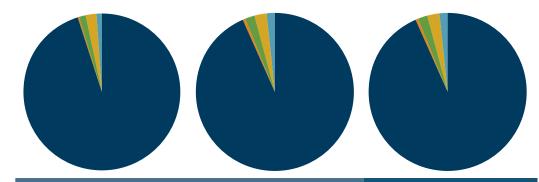
IMRF will continue to provide secure and stable retirements for thousands of public employees in Illinois while limiting employer costs long into the future.

#### **REVENUES BY SOURCE**



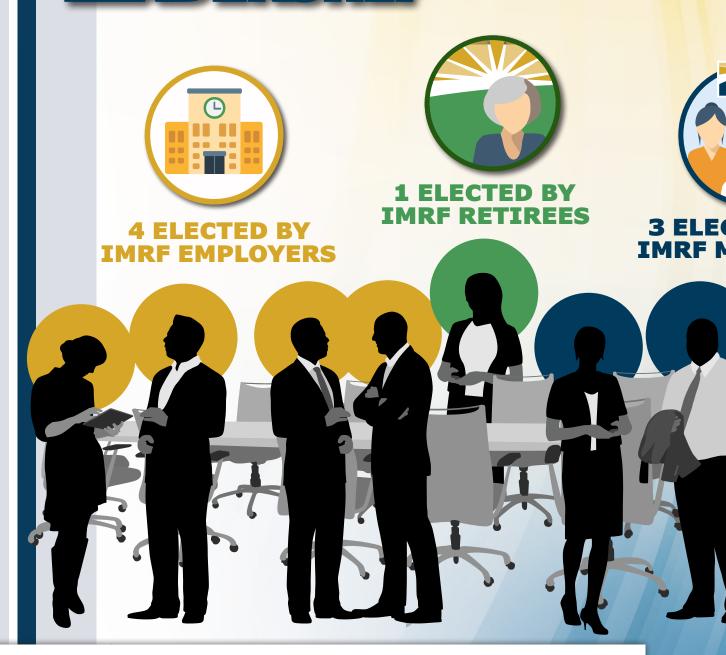
|             | 2021             | 2020             | 2019             |
|-------------|------------------|------------------|------------------|
| Members     | \$ 471,392,017   | \$ 449,724,661   | \$ 437,930,911   |
| Employers   | 969,420,117      | 927,591,609      | 780,149,698      |
| Investments | 8,449,159,554    | 6,722,902,177    | 7,517,807,905    |
| Total       | \$ 9,889,971,688 | \$ 8,100,218,447 | \$ 8,735,888,514 |

#### **EXPENSES BY TYPE**



|                | 2021             | 2020             | 2019             |
|----------------|------------------|------------------|------------------|
| Annuities      | \$ 2,624,826,197 | \$ 2,451,850,667 | \$ 2,303,010,509 |
| Disability     | 9,334,722        | 8,383,136        | 8,879,576        |
| Death          | 39,287,258       | 34,083,355       | 35,347,003       |
| Refunds        | 60,073,886       | 52,178,126       | 51,372,047       |
| Administrative | 28,318,297       | 31,776,955       | 38,373,543       |
| Total          | \$ 2,761,840,360 | \$ 2,578,272,239 | \$ 2,436,982,678 |

# TMRESUSTATIVABLE SUCCESS FACTOR STRATEGIC TRUSTEE LEADERSHIP



The IMRF Board of Trustees provides the strategic guidance the organization requires to thrive. Our Trustees are all fiduciaries, which means they are legally bound to make decisions in the best interest of the retirement fund. Political appointees serve as Trustees at many public pensions. Not at IMRF. All IMRF Trustees are elected to five-year terms by the members, the retirees, and the IMRF employers. To be eligible to serve, an IMRF Trustee must either be vested to receive an IMRF pension, or already be retired and collecting one. Over the last eighty years, these Trustee requirements have served as foundational Sustainable Success Factors for the organization.

See page 3 for more information about IMRF's current Board of Trustees.



## **FINANCIAL**

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

#### **BASIC FINANCIAL STATEMENTS**

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

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

#### REQUIRED SUPPLEMENTARY INFORMATION

- **57.** Required Supplementary Information
- **60.** Notes to Required Supplementary Information

#### **SUPPLEMENTARY INFORMATION**

**62.** Supplementary Information





#### Plante & Moran, PLLC

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

To the Board of Trustees
Illinois Municipal Retirement Fund

#### **Opinion**

We have audited the financial statements of Illinois Municipal Retirement Fund (IMRF) as of and for the years ended December 31, 2021 and 2020 and the related notes to the financial statements, which collectively comprise IMRF's basic financial statements, as listed in the table of contents.

In our opinion, the accompanying financial statements present fairly, in all material respects, the fiduciary net position of Illinois Municipal Retirement Fund as of December 31, 2021 and 2020 and the changes in its fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

#### **Basis for Opinion**

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the *Auditor's Responsibilities* for the Audits of the Financial Statements section of our report. We are required to be independent of IMRF and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about IMRF's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

#### Auditor's Responsibilities for the Audits of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and, therefore, is not a guarantee that audits conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing audits in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audits.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or
  error, and design and perform audit procedures responsive to those risks. Such procedures include examining,
  on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audits 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 IMRF's internal control. Accordingly, no such opinion is expressed.

To the Board of Trustees
Illinois Municipal Retirement Fund

- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about IMRF's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audits, significant audit findings, and certain internal control-related matters that we identified during the audits.

#### Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and other required supplementary information, as identified in the table of contents, be presented to supplement the basic financial statements. Such information is the responsibility of management and, 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 supplemental 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.

#### Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise Illinois Municipal Retirement Fund's basic financial statements. The other supplementary information, as identified in the table of contents, is presented for the purpose of additional analysis and is not a required part of the basic financial statements. Such information 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. The 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 other supplementary information is fairly stated in all material respects in relation to the basic financial statements as a whole.

#### Other Information

Management is responsible for the other information included in the Annual Comprehensive Financial Report. The other information comprises the introduction, investment, actuarial, statistical and strategic plan sections, as listed in the table of contents, but does not include the basic financial statements and our auditor's report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements or whether the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Plante & Moran, PLLC



#### 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, 2021, and December 31, 2020. 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 2021, contributions of \$1,441 million, investment gain of \$8,449 million, and deductions to fiduciary net position of \$2,762 million resulted in a net increase of \$7,128 million. This net increase brought the Fund's fiduciary net position to \$57.7 billion.

#### FIDUCIARY NET POSITION

To begin the financial analysis, summarized comparisons of IMRF's Fiduciary Net Position for 2021 versus 2020 and 2020 versus 2019 are presented below.

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

|   | 2021        | 2020        | Dollar Change | Percent Change |
|---|-------------|-------------|---------------|----------------|
| Cash and cash equivalents                   | \$ (5.3)    | \$ (5.4)    | \$ 0.1        | (1.9)%         |
| Receivables and prepaids                    | 516.0       | 573.0       | (57.0)        | (9.9)          |
| Investments                                 | 57,286.4    | 50,273.6    | 7,012.8       | 13.9           |
| Invested securities lending cash collateral | 327.3       | 237.8       | 89.5          | 37.6           |
| Capital assets, net                         | 57.3        | 48.2        | 9.1           | 18.9           |
| Total assets                                | 58,181.7    | 51,127.2    | 7,054.5       | 13.8           |
| Deferred outflow of resources               | 3.1         | 4.7         | (1.6)         | (34.0)         |
| Liabilities                                 | 471.1       | 550.9       | (79.8)        | (14.5)         |
| Deferred inflow of resources                | 13.7        | 9.1         | 4.6           | 50.5           |
| Fiduciary net position                      | \$ 57,700.0 | \$ 50,571.9 | \$ 7,128.1    | 14.1%          |

As the table shows, fiduciary net position increased by \$7,128.1 million, or 14.1% in 2021.

This increase reflects the increase in investment returns in 2021. The decrease in receivables and prepaids in 2021 is largely due to the decrease in the receivables from brokers for unsettled trades at year-end due to a smaller number of trades outstanding at year-end 2021 compared to 2020. The decrease in liabilities in 2021 is due primarily to the decrease in the payables to brokers for unsettled trades at year-end 2021.

The following table presents the investment allocation as of year-end 2021 and 2020, as compared to IMRF's target allocation as of December 31, 2021.

|                         | 2021  | 2021 Target | 2020  |
|-------------------------|-------|-------------|-------|
| U.S. equities           | 40.3% | 39.0%       | 40.7% |
| International equities  | 19.4  | 15.0        | 20.4  |
| Fixed income            | 22.6  | 25.0        | 24.0  |
| Real estate             | 7.8   | 10.0        | 7.1   |
| Alternative investments | 8.7   | 10.0        | 6.4   |
| Short-term              | 1.2   | 1.0         | 1.4   |

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 decrease its allocation to alternative investment strategies. The current target allocations were reconfirmed during Investment Committee meetings in 2021. IMRF continuously monitors its actual investment allocations in relation to its targets and rebalances as appropriate.

#### **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 increase in 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.



#### CHANGES IN FIDUCIARY NET POSITION

Summarized comparisons of IMRF's Changes in Fiduciary Net Position for 2021 versus 2020 are presented below.

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

|  | 2021       | 2020       | Dollar Change | Percent Change |
|--|------------|------------|---------------|----------------|
| Additions                              |            |            |               |                |
| Member contributions                   | \$ 471.4   | \$ 449.7   | \$ 21.7       | 4.8%           |
| Employer contributions                 | 969.4      | 927.6      | 41.8          | 4.5            |
| Net investment gain                    | 8,449.2    | 6,722.9    | 1,726.3       | 25.7           |
| Total additions                        | 9,890.0    | 8,100.2    | 1,789.8       | 22.1%          |
| Deductions                             |            |            |               |                |
| Benefits                               | 2,673.5    | 2,494.3    | 179.2         | 7.2            |
| Refunds                                | 60.1       | 52.2       | 7.9           | 15.1           |
| Administrative expenses                | 28.3       | 31.8       | (3.5)         | (11.0)         |
| Total deductions                       | 2,761.9    | 2,578.3    | 183.6         | 7.1            |
| Net increase in fiduciary net position | \$ 7,128.1 | \$ 5,521.9 | \$ 1,606.2    | 29.1%          |

#### **ADDITIONS**

Additions needed to fund benefits are accumulated through contributions and returns on invested funds. Contributions for 2021 totaled \$1,441 million which was 4.6% more than 2020. The increase reflects the increase in employer payroll from \$7,568 million in 2020 to \$7,811 million in 2021. 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. The average employer rate decreased from 11.6% in 2020 to 11.2% in 2021. 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.

Time-weighted investment gains for 2021 were 16.6%. The \$8,449 million investment gain in 2021 represents a \$1,726 million change from the \$6,723 million gain in 2020. IMRF's 2021 total investment portfolio return was up due to a robust economy with consumer spending and their optimism for the end of the pandemic.

In 2021, IMRF had net appreciation in the value of investments of \$7,674 million, a \$1,656 million change from the \$6,018 million of appreciation recorded in 2020. Interest, dividends, and equity fund income totaled \$956 million, an increase from \$855 million in 2020. Securities lending income net of related expenses was \$5.7 million for 2021, a decrease of \$4.0 million from 2020. Direct investment expenses increased to \$187 million in 2021 from \$159 million in 2020.

The total rate of return for the portfolio in 2021 was 16.6% compared to 14.8% in 2020. IMRF's U.S. stock portfolio returned a 24.7% compared to 25.7% custom benchmark. The fixed income portfolio returned a negative 0.5% compared to a negative 1.6% for the Bloomberg Aggregate Bond Index. The international stock portfolio returned 9.4% compared to 7.8% for the MSCI All-Country World Index ex-US. The real estate portfolio returned 21.9% compared to 21.0% for the custom benchmark. The alternative investment portfolio returned 46.4%.

#### **DEDUCTIONS**

The expenses paid by IMRF include benefit payments, refunds, and administrative expenses. Expenses for 2021 totaled \$2,762 million, \$184 million over 2020. The increase in benefit payments to members and beneficiaries resulted primarily from growth in the number of annuitants to 147,134 in 2021 from 142,329 in 2020, as well as an increase in the amount of the average benefit.

# **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 (loss) 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 (decrease) 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.

#### 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, 2021  | 17.02% |
| December 31, 2020  | 15.20% |
| December 31, 2019  | 19.82% |



#### STATEMENTS OF FIDUCIARY NET POSITION

| As of December 31                             | 2021              | 2020              |
|---|-------------------|-------------------|
| Assets  |                   |                   |
| Cash and cash equivalents                     | \$ (5,282,565)    | \$ (5,389,893)    |
| Receivables and prepaid expenses              |                   |                   |
| Contributions                                 | 94,015,060        | 92,115,616        |
| Investment income                             | 119,649,066       | 100,774,056       |
| Receivables from brokers for unsettled trades | 88,975,972        | 190,772,228       |
| Prepaid expenses                              | 213,397,023       | 189,301,995       |
| Total receivables and prepaid expenses        | 516,037,121       | 572,963,895       |
| Investments, at fair value                    |                   |                   |
| Fixed income                                  | 12,942,015,122    | 12,055,301,447    |
| Stocks  | 34,178,517,237    | 30,708,540,954    |
| Short-term investments                        | 735,743,099       | 734,750,538       |
| Real estate                                   | 4,440,105,815     | 3,565,721,898     |
| Alternative investments                       | 4,990,058,724     | 3,209,323,541     |
| Total investments                             | 57,286,439,997    | 50,273,638,378    |
| Invested securities lending cash collateral   | 327,265,865       | 237,845,278       |
| Capital assets                                |                   |                   |
| Equipment, at cost                            | 80,980,644        | 69,572,141        |
| Accumulated depreciation                      | (23,646,082)      | (21,331,762)      |
| Total capital assets                          | 57,334,562        | 48,240,379        |
| Total assets                                  | 58,181,794,980    | 51,127,298,037    |
| Total deferred outflow of resources           | 3,109,563         | 4,722,490         |
| Liabilities                                   |                   |                   |
| Accrued expenses and benefits payable         | 43,043,685        | 39,377,231        |
| Securities lending cash collateral            | 327,265,865       | 237,845,278       |
| Payables to brokers for unsettled trades      | 100,797,890       | 273,716,514       |
| Total liabilities                             | 471,107,440       | 550,939,023       |
| Total deferred inflow of resources            | 13,743,328        | 9,159,057         |
| Net position restricted for pensions          | \$ 57,700,053,775 | \$ 50,571,922,447 |

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

#### STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

| For the Years Ended December 31                             | 2021              | 2020              |
|---|-------------------|-------------------|
| Additions   |                   |                   |
| Contributions   |                   |                   |
| Members for retirement coverage                             | \$ 471,392,017    | \$ 449,724,661    |
| Employers for benefit plan coverage                         | 969,420,117       | 927,591,609       |
| Total contributions   | 1,440,812,134     | 1,377,316,270     |
| Investment income   |                   |                   |
| From investing activities                                   |                   |                   |
| Interest  | 287,764,337       | 321,434,065       |
| Dividends   | 391,319,884       | 328,059,916       |
| Equity fund income, net                                     | 277,032,182       | 205,024,829       |
| Net appreciation in fair value of investments               | 7,674,039,612     | 6,017,852,304     |
| Investment activity gain                                    | 8,630,156,015     | 6,872,371,114     |
| Less: Direct investment expense                             | (186,744,292)     | (159,185,717)     |
| Net investment activity gain                                | 8,443,411,723     | 6,713,185,397     |
| From security lending activity                              |                   |                   |
| Securities lending income                                   | 4,945,189         | 6,753,523         |
| Net securities lending management fees and borrower rebates | 787,892           | 2,950,332         |
| Net security lending activity income                        | 5,733,081         | 9,703,855         |
| Total investment gain                                       | 8,449,144,804     | 6,722,889,252     |
| Other   | 14,750            | 12,925            |
| Total additions   | 9,889,971,688     | 8,100,218,447     |
| Deductions  |                   |                   |
| Annuities   | 2,624,826,197     | 2,451,850,667     |
| Disability benefits   | 9,334,722         | 8,383,136         |
| Death benefits  | 39,287,258        | 34,083,355        |
| Refunds   | 60,073,886        | 52,178,126        |
| Administrative expenses                                     | 28,318,297        | 31,776,955        |
| Total deductions  | 2,761,840,360     | 2,578,272,239     |
| Net increase  | 7,128,131,328     | 5,521,946,208     |
| Net position restricted for pensions                        |                   |                   |
| Beginning of year   | 50,571,922,447    | 45,049,976,239    |
| End of year   | \$ 57,700,053,775 | \$ 50,571,922,447 |

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



#### NOTES TO BASIC FINANCIAL STATEMENTS (December 31, 2021 and 2020)

#### 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.

#### 1. EMPLOYERS

|                         | 2021  | 2020  |
|-------------------------|-------|-------|
| Participating employers | 3,032 | 3,031 |

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

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

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

#### 2. MEMBERS

|  | 2021    | 2020    |
|--|---------|---------|
| Inactive members   |         |         |
| Retirees and beneficiaries currently receiving benefits            | 147,134 | 142,329 |
| Terminated members entitled to benefits but not yet receiving them | 15,545  | 15,011  |
| Terminated members—non-vested                                      | 122,846 | 114,768 |
| Total inactive members   | 285,525 | 272,108 |
| Active members   |         |         |
| Non-vested   | 93,166  | 89,285  |
| Vested   | 79,144  | 81,450  |
| Total active members   | 172,310 | 170,735 |
| Grand total  | 457,835 | 442,843 |

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

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

#### 3. CONTRIBUTIONS

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

#### 4. BENEFIT PROVISIONS

Benefits are established by statute and may only be changed by the 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, 2021, and December 31, 2020. 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<br>Tier 1   | Revised ECO<br>Tier 2   |
|---|--|---|--|---|---|---|---|
| Vesting                                 | 8 years  | 10 years  | 20 years   | 10 years  | 8 years   | 8 years in each<br>elected position   | 8 years in each<br>elected<br>position; 10<br>years in total  |
| Minimum Age<br>For Unreduced<br>Benefit | 35+ years of<br>service: 55,<br>otherwise 60                   | 35+ years<br>of service: 62,<br>otherwise 67  | 50 with 20+<br>years of<br>service                             | 55 with 10+<br>years of<br>service  | Sheriffs with 20<br>years of SLEP<br>service: 50,<br>otherwise 55       | Sheriffs with 20 years of SLEP service: 50, otherwise 55                                    | Sheriffs with 10<br>years of SLEP<br>service: 62,<br>otherwise 67   |
| Final<br>Rate Of Earnings               | Highest<br>consecutive 48<br>months<br>in the last<br>10 years | Highest consecutive 96 months in the last 10 years; pensionable earnings currently capped at \$116,740.42 for 2021 increasing annually by 3% or ½ of CPI, whichever is less | Highest<br>consecutive<br>48 months in<br>the last<br>10 years | Highest consecutive 96 months in the last 10 years; pensionable earnings currently capped at \$116,740.42 for 2021 increasing annually by 3% or ½ of CPI, whichever is less | Annual salary<br>on the<br>last day<br>of ECO<br>participation          | Highest<br>consecutive 48<br>months in the<br>last 10 years<br>for each elected<br>position | Highest consecutive 96 months in the last 10 years; pensionable earnings currently capped at \$116,740.42 for 2021 increasing annually by 3% or ½ of CPI, whichever is less |
| Survivor<br>Benefits                    | Annuity for<br>eligible<br>spouse                              | Annuity for<br>eligible<br>spouse   | Annuity for<br>eligible<br>spouse                              | Annuity for<br>eligible<br>spouse   | Annuity for<br>eligible spouse<br>and unmarried<br>children<br>under 18 | Annuity for<br>eligible spouse<br>and unmarried<br>children<br>under 18                     | Annuity for<br>eligible spouse<br>and unmarried<br>children<br>under 18   |
| Post-Retirement<br>Increase             | 3% of original<br>amount                                       | 3% or 1/2 of CPI,<br>whichever is less<br>of original amount  | 3% of original<br>amount                                       | 3% or 1/2 of<br>CPI, whichever<br>is less of<br>original amount   | 3% of original<br>amount  | 3% of original<br>amount  | 3% or 1/2 of<br>CPI, whichever<br>is less of<br>original amount   |
| Early Retirement                        | At age 55,<br>discount based<br>on age and<br>service          | At age 62,<br>discount based<br>on age<br>and service   | None   | At age 50,<br>discount based<br>on age and<br>service   | None  | None  | At age 62,<br>discount based<br>on age and<br>service   |



#### Refunds

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



- 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.

In May 2020, GASB issued Statement No. 95, "Postponement of the Effective Dates of Certain Authoritative Guidance." The primary objective of this Statement is to provide temporary relief to governments and other stakeholders in light of the COVID-19 pandemic. That objective is accomplished by postponing the effective dates of certain provisions in Statements and Implementation Guides that first became effective or are scheduled to become effective for periods beginning after June 15, 2018, and later.

The effective dates of certain provisions contained in the following pronouncements are postponed by one year:

- Statement No. 83, Certain Asset Retirement Obligations
- Statement No. 84, Fiduciary Activities
- · Statement No. 88, Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements
- Statement No. 89, Accounting for Interest Cost Incurred before the End of a Construction Period
- Statement No. 90, Majority Equity Interests
- Statement No. 91, Conduit Debt Obligations
- Statement No. 92, Omnibus 2020
- Statement No. 93, Replacement of Interbank Offered Rates
- Implementation Guide No. 2017-3, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions (and Certain Issues Related to OPEB Plan Reporting)
- Implementation Guide No. 2018-1, Implementation Guidance Update—2018
- Implementation Guide No. 2019-1, Implementation Guidance Update—2019
- Implementation Guide No. 2019-2, Fiduciary Activities.

The effective dates of the following pronouncements are postponed by 18 months:

- Statement No. 87, Leases
- Implementation Guide No. 2019-3, Leases.

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 manage a Section 457 deferred compensation plan, therefore there is no effect on its financial statements.

#### D. DEPOSITS AND INVESTMENT RISK DISCLOSURES

#### 1. DEPOSITS

Custodial credit risk for deposits is the risk that, in the event of a financial institution failure, IMRF's deposits may not be returned. 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. As of December 31, 2021 and 2020, IMRF did not have bank deposits that were exposed to custodial credit risk.

|  | 2021           | 2020           |
|--|----------------|----------------|
| Carrying amounts at December 31  |                |                |
| Cash and cash equivalents  | \$ (5,282,565) | \$ (5,389,893) |
| Bank balances at December 31   |                |                |
| Bank balances  | \$ 147,799     | \$ 121,174     |
| Amount exposed to custodial credit risk                                    |                |                |
| Cash balance held with investment manager exposed to custodial credit risk | \$ 1,597,674   | \$ 1,354,238   |

#### 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, 2021.

|        | Asset Class   |                        |                 |                |                         |            |
|--------|---------------|------------------------|-----------------|----------------|-------------------------|------------|
|        | U.S. equities | International equities | Fixed<br>income | Real<br>estate | Alternative investments | Short term |
| Target | 39%           | 15%                    | 25%             | 10%            | 10%                     | 1%         |

For the year ended December 31, 2021, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 17.02%. For the year ended December 31, 2020, it was a 15.20%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.



#### 3. INVESTMENT SUMMARY

The following table presents a summary of the Fund's investments by type at December 31, 2021 and 2020:

|                                       | 2021              | 2020              |
|---------------------------------------|-------------------|-------------------|
| U.S. government & agency fixed income | \$ 3,893,544,474  | \$ 3,170,256,730  |
| U.S. corporate fixed income           | 3,786,403,517     | 3,632,124,119     |
| U.S. fixed income funds               | 3,746,668,113     | 3,890,462,031     |
| Foreign fixed income securities       | 734,087,107       | 802,751,514       |
| Foreign fixed income funds            | 781,311,911       | 559,707,053       |
| U.S. equities                         | 19,299,332,907    | 16,379,737,220    |
| U.S. equity funds                     | 3,809,185,342     | 4,069,464,918     |
| Foreign equities                      | 7,667,238,765     | 6,692,071,873     |
| Foreign equity funds                  | 3,402,760,223     | 3,567,266,943     |
| Foreign currency forward contracts    | (4,842,701)       | 2,452,889         |
| Pooled short-term investment funds    | 723,304,310       | 715,861,592       |
| Real estate                           | 4,440,105,815     | 3,565,721,898     |
| Private equity                        | 4,989,950,351     | 3,209,146,204     |
| Absolute return funds                 | 108,373           | 177,337           |
| Swaps                                 | (300,894)         | 8,314,388         |
| Options                               | 61,199            | 19,538            |
| Other                                 | 17,521,185        | 8,102,131         |
| Total investments at fair value       | \$ 57,286,439,997 | \$ 50,273,638,378 |

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.

|  | 2021             | 2020             |
|--|------------------|------------------|
| MFB NT Collective Aggregate Bond Index Fund    | \$ 1,817,007,757 | \$ 1,946,269,369 |
| BlackRock US Debt Index Fund                   | 1,837,987,280    | 1,867,344,078    |
| NT Collective U.S. Marketcap Equity Index Fund | 3,255,297,343    | 2,948,174,213    |
| NT Collective EAFE Index Fund                  | 2,015,936,998    | 2,094,370,592    |
| Genesis Emerging Markets Fund                  | 1,357,488,612    | 1,457,611,946    |

#### 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:

|                                 | 2021          | 2020         |
|---------------------------------|---------------|--------------|
| Investments in foreign currency | \$ 18,990,300 | \$ 9,620,632 |

#### 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.



#### **Quality Rating**

|                             | 2021              | 2020              |
|-----------------------------|-------------------|-------------------|
| Corporate and International |                   |                   |
| AAA                         | \$ 235,293,664    | \$ 187,650,471    |
| AA                          | 262,942,109       | 253,616,967       |
| Α                           | 736,424,357       | 817,986,676       |
| BBB                         | 1,679,748,836     | 1,623,610,842     |
| BB                          | 876,896,928       | 760,386,141       |
| В                           | 347,530,181       | 347,745,959       |
| CCC                         | 41,974,174        | 71,330,670        |
| CC                          | 151,968           | 20,680            |
| D                           | 963,853           | 2,418,267         |
| Not Rated                   | 316,049,545       | 280,634,770       |
| Government and Agencies     |                   |                   |
| Agency                      | 3,383,103,973     | 2,387,915,762     |
| AAA                         | 114,087,997       | 238,984,529       |
| AA                          | 347,929,938       | 604,718,232       |
| Α                           | 71,185,035        | 17,698,581        |
| BBB                         | 11,552,523        | 4,182,030         |
| ВВ                          | 839,378           | 870,922           |
| В                           | 22,740,046        | 1,148,410         |
| Not Rated                   | 11,845,397        | 4,212,454         |
| Fixed Income Funds          |                   |                   |
| Index                       | 4,480,755,220     | 4,450,169,084     |
| Total                       | \$ 12,942,015,122 | \$ 12,055,301,447 |

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 2021 and 2020. The international fixed income fund had an average quality rating B for 2021 and 2020.

#### 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, 2021 and December 31, 2020, the effective duration of the Barclays Aggregate Bond Index was 6.35 and 6.05, respectively. At the same points in time, the effective duration of IMRF debt securities portfolio was 4.28 and 3.95, respectively.

| Investment                      | 2021 Fair Value   | Effective<br>Weighted<br>Duration Rate | 2020 Fair Value   | Effective<br>Weighted<br>Duration Rate |
|---------------------------------|-------------------|--|-------------------|--|
| U.S. Corporate                  | \$ 3,786,403,517  | 4.97                                   | \$ 3,632,124,119  | 5.03                                   |
| U.S. Government & Agencies      | 3,893,544,474     | 5.67                                   | 3,170,256,730     | 5.04                                   |
| U.S. Fixed Income Funds         | 3,746,668,113     | 2.96                                   | 3,890,462,031     | 2.90                                   |
| International                   | 781,311,911       | 4.18                                   | 802,751,514       | 2.34                                   |
| International Fixed Income Fund | 734,087,107       | 0.23                                   | 559,707,053       | 0.24                                   |
| Total                           | \$ 12,942,015,122 | 4.28                                   | \$ 12,055,301,447 | 3.95                                   |

#### 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:

|                               | 2021             | 2020             |
|-------------------------------|------------------|------------------|
| Foreign Equities              |                  |                  |
| Australian dollar             | \$ 161,206,178   | \$ 140,519,082   |
| Brazilian real                | 126,374,486      | 112,814,917      |
| British pound sterling        | 809,515,435      | 701,229,318      |
| Canadian dollar               | 292,614,547      | 240,949,539      |
| Chilean peso                  | 1,325,400        | 6,927,435        |
| Colombian peso                | 7,005,930        | 6,941,493        |
| Danish krone                  | 157,495,078      | 154,000,161      |
| Euro                          | 1,843,716,497    | 1,505,361,493    |
| Hong Kong dollar              | 437,436,077      | 478,486,950      |
| Hungarian forint              | 10,659,509       | 5,564,392        |
| Indian rupee                  | 131,985,134      | 81,803,961       |
| Indonesian rupiah             | 30,302,032       | 15,645,061       |
| Japanese yen                  | 973,216,286      | 874,204,775      |
| Malaysian ringgit             | 2,242,602        | 424,939          |
| Mexican peso                  | 55,255,245       | 72,188,843       |
| New Israeli shekel            | 6,354,365        | 6,450,316        |
| New Taiwan dollar             | 281,089,307      | 270,287,681      |
| New Zealand dollar            | 9,217,017        | 10,697,671       |
| Norwegian krone               | 72,472,455       | 50,693,493       |
| Philippine peso               | 6,698,343        | -                |
| Polish zloty                  | 4,732,735        | 4,619,560        |
| Singapore dollar              | 30,328,204       | 34,826,410       |
| South African rand            | 22,046,632       | 11,772,060       |
| South Korean won              | 219,947,782      | 204,804,892      |
| Swedish krona                 | 291,019,360      | 190,591,567      |
| Swiss franc                   | 477,012,005      | 368,345,275      |
| Thai baht                     | 27,911,717       | 20,523,486       |
| Turkish lira                  | 19,654,134       | 29,859,536       |
| United Arab Emirates dirham   | 2,932,780        | 2,315,289        |
| United States dollar          | 4,558,231,716    | 3,198,877,275    |
| <b>Total Foreign Equities</b> | \$11,069,998,988 | \$ 8,801,726,870 |



|                                   | 2021              | 2020              |
|-----------------------------------|-------------------|-------------------|
| Foreign Fixed Income              |                   |                   |
| Australian dollar                 | \$ -              | \$ 15,039,767     |
| Brazilian real                    | 8,467,897         | 16,308,836        |
| Canadian dollar                   | -                 | 9,349,258         |
| Chilean peso                      | 9,797,856         | 10,113,716        |
| Colombian peso                    | 5,528,529         | 7,599,141         |
| Czech koruna                      | 4,086,891         | 1,445,126         |
| Euro                              | 783,077           | 15,876,083        |
| Hungarian forint                  | 2,631,694         | 2,303,203         |
| Indian rupee                      | -                 | 973,890           |
| Indonesian rupiah                 | 17,803,277        | 20,885,175        |
| Japanese yen                      | 4,540,878         | 4,893,759         |
| Malaysian ringgit                 | 6,302,503         | 5,418,455         |
| Mexican peso                      | 37,434,705        | 40,586,500        |
| Peruvian nuevo sol                | 2,537,495         | 3,147,009         |
| Russian ruble                     | 29,450,351        | 31,336,143        |
| South African rand                | 16,697,043        | 13,426,683        |
| Thai baht                         | 7,523,590         | 9,717,894         |
| Turkish lira                      | -                 | 489,144           |
| United States dollar              | 1,361,813,232     | 1,153,548,785     |
| <b>Total Foreign Fixed Income</b> | 1,515,399,018     | 1,362,458,567     |
| Total                             | \$ 12,585,398,006 | \$ 10,164,185,437 |

## 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 149 days as of December 31, 2021, and 207 days as of December 31, 2020. 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 28 days as of December 31, 2021, and 30 days as of December 31, 2020. 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 2021 and 2020, 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 as of December 31, 2021 and 2020.

Securities lent are included in the Statements of Fiduciary Net Position. The fair value of collateral received includes cash collateral of \$327,265,865 and \$237,845,278 at December 31, 2021 and December 31, 2020, respectively.

| Loans outstanding as of           | December 31, 2021 | December 31, 2020 |
|-----------------------------------|-------------------|-------------------|
| Fair value of securities loaned   | \$ 2,672,240,577  | \$ 1,986,173,558  |
| Fair value of collateral received | \$ 2,732,303,217  | \$ 2,033,847,864  |

#### 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.

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, 2021 and December 31, 2020 is as follows:

| Fair Value as of                         | December 31, 2021 | December 31, 2020 |
|--|-------------------|-------------------|
| Pending Foreign Exchange Purchases       |                   |                   |
| Australian dollar                        | \$ 36,629,186     | \$ 47,606,450     |
| Brazilian real                           | 302,314,928       | 13,283,208        |
| British pound sterling                   | 180,773,916       | 14,147,663        |
| Canadian dollar                          | 121,198,093       | 61,559,951        |
| Chilean peso                             | 46,145,499        | 4,080,254         |
| Chinese yuan renminbi                    | 54,451,524        | 16,171,368        |
| Colombian peso                           | 44,310,378        | 5,968,212         |
| Czech koruna                             | 11,487,315        | 8,843,364         |
| Danish krone                             | 12,032,650        | 12,480,136        |
| Egyptian pound                           | 26,522,121        | -                 |
| Euro                                     | 182,541,380       | 58,547,734        |
| Hong Kong dollar                         | 27,050,612        | 16,933,733        |
| Hong Kong offshore Chinese yuan renminbi | 139,104,140       | 124,108,344       |
| Hungarian forint                         | 56,096,177        | 6,186,085         |
| Indian rupee                             | 191,288,355       | 14,071,755        |
| Indonesian rupiah                        | 38,404,205        | 20,365,723        |
| Japanese yen                             | 397,648,789       | 46,037,017        |
| Kuwaiti dinar                            | 527,474           | -                 |
| Malaysian ringgit                        | 3,594,780         | 3,289,419         |
| Mexican peso                             | 194,652,141       | 13,886,518        |
| New Israeli shekel                       | 11,168,342        | 1,841,279         |
| New Romanian leu                         | -                 | 1,672,431         |
| New Taiwan dollar                        | 100,732,046       | 1,268,297         |
| New Zealand dollar                       | 70,291,931        | 70,627,311        |
| Norwegian krone                          | 42,100,127        | 16,409,278        |
| Peruvian nuevo sol                       |                   | 514,333           |
| Philippine peso                          | 43,301,195        | 1,143,510         |
| Polish zloty                             | 47,784,028        | 23,393,633        |
| Russian ruble                            | 75,928,991        | 9,904,138         |
| Saudi riyal                              | 323,981           | 324,351           |
| Singapore dollar                         | 11,131,111        | 9,939,132         |
| South African rand                       | 56,041,687        | 11,357,382        |
| South Korean won                         | 65,877,037        | 7,486,552         |
| Swedish krona                            | 27,511,638        | 18,080,322        |
| Swiss franc                              | 104,144,491       | 38,992,310        |
| Thai baht                                | 7,989,362         | 8,593,267         |
| Turkish lira                             | 9,174,381         | 20,072,546        |
| United Arab Emirates dirham              | 745,124           | 3,584,102         |
| United States dollar                     | 2,878,607,307     | 819,956,016       |
| Total Purchases                          | \$ 5,619,626,442  | \$ 1,552,727,124  |

| Fair Value as of                         | December 31, 2021 | December 31, 2020 |
|--|-------------------|-------------------|
| Pending Foreign Exchange Sales           |                   |                   |
| Australian dollar                        | \$ (75,954,009)   | \$ (30,666,216)   |
| Brazilian real                           | (264,530,967)     | (53,446,504)      |
| British pound sterling                   | (111,035,212)     | (43,812,636)      |
| Canadian dollar                          | (99,443,662)      | (105,835,751)     |
| Chilean peso                             | (24,547,365)      | (6,763,089)       |
| Chinese yuan renminbi                    | (22,115,053)      | (2,227,619)       |
| Colombian peso                           | (28,816,686)      | (3,882,461)       |
| Czech koruna                             | (3,257,407)       | -                 |
| Danish krone                             | (19,338,628)      | (21,601,940)      |
| Egyptian pound                           | (25,033,064)      | -                 |
| Euro                                     | (313,913,572)     | (168,787,826)     |
| Hong Kong dollar                         | (38,428,826)      | (18,500,160)      |
| Hong Kong offshore Chinese yuan renminbi | (171,572,790)     | (2,741,167)       |
| Hungarian forint                         | (13,860,030)      | (3,351,926)       |
| Indian rupee                             | (174,776,475)     | (17,194,752)      |
| Indonesian rupiah                        | (44,224,726)      | (22,348,333)      |
| Japanese yen                             | (500,325,224)     | (40,418,285)      |
| Kuwaiti dinar                            | (527,404)         | -                 |
| Mexican peso                             | (116,600,876)     | (8,763,140)       |
| New Israeli shekel                       | (18,073,737)      | (5,527,625)       |
| New Romanian leu                         | (445,047)         | -                 |
| New Taiwan dollar                        | (197,497,906)     | (125,337,587)     |
| New Zealand dollar                       | (36,091,530)      | (6,945,554)       |
| Norwegian krone                          | (45,081,229)      | (8,175,313)       |
| Peruvian nuevo sol                       | (1,959,879)       | -                 |
| Philippine peso                          | (40,051,248)      | (4,462,216)       |
| Polish zloty                             | (20,926,231)      | (9,402,118)       |
| Russian ruble                            | (85,853,624)      | (22,759,305)      |
| Saudi riyal                              | (301,324)         | (301,668)         |
| Singapore dollar                         | (11,078,866)      | (9,988,494)       |
| South African rand                       | (47,455,062)      | (4,627,207)       |
| South Korean won                         | (137,426,350)     | (49,975,006)      |
| Swedish krona                            | (51,067,943)      | (9,732,269)       |
| Swiss franc                              | (92,013,816)      | (19,642,229)      |
| Thai baht                                | (7,291,143)       | (4,599,220)       |
| Turkish lira                             | (10,188,723)      | (4,614,616)       |
| United Arab Emirates dirham              | (109,912)         | (1,540,798)       |
| United States dollar                     | (2,773,253,597)   | (712,301,205)     |
| Total Sales                              | (5,624,469,143)   | (1,550,274,235)   |
| Net Unrealized (Loss)/Gain               | \$ (4,842,701)    | \$2,452,889       |



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, 2021 and December 31, 2020 are as follows:

| Fair Value as of   | December 31, 2021 |                        | December 31, 2020 |                        | Change          |
|--|-------------------|------------------------|-------------------|------------------------|-----------------|
|  | Amount            | Number of<br>Contracts | Amount            | Number of<br>Contracts | Amount          |
| Fixed income derivative futures sold                         | \$148,573,526     | 821                    | \$181,361,980     | 797                    | \$(32,788,454)  |
| Fixed income derivative offset futures purchased             | 148,573,526       | 821                    | 181,361,980       | 797                    | (32,788,454)    |
| Fixed income derivative offset futures sold                  | 326,245,608       | 2,541                  | 271,707,220       | 1,769                  | 54,538,388      |
| Fixed income derivative futures purchased                    | 326,245,608       | 2,541                  | 271,707,220       | 1,769                  | 54,538,388      |
|  |                   |                        |                   |                        |                 |
| Equity derivative offset futures sold                        | \$ 38,068,000     | -                      | \$ 46,110,240     | -                      | \$ (8,042,240)  |
| Equity derivative futures purchased                          | 38,068,000        | 160                    | 46,110,240        | 246                    | (8,042,240)     |
|  |                   |                        |                   |                        |                 |
| Cash and cash equivalent derivative futures sold             | \$ 53,813,700     | 216                    | \$352,080,962     | 1,411                  | \$(298,267,262) |
| Cash and cash equivalent derivative offset futures purchased | 53,813,700        | 216                    | 352,080,962       | 1,411                  | (298,267,262)   |
| Cash and cash equivalent derivative offset futures sold      | 672,850,687       | 2,730                  | -                 | -                      | 672,850,687     |
| Cash and cash equivalent derivative futures purchased        | 672,850,687       | 2,730                  | -                 | -                      | 672,850,687     |

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, 2021, and December 31, 2020 are as follows:

| Fair Value as of       | Decembe   | December 31, 2021     |           | er 31, 2020           | Change in<br>Fair Value |
|------------------------|-----------|-----------------------|-----------|-----------------------|-------------------------|
|                        | Amount    | <b>Notional Value</b> | Amount    | <b>Notional Value</b> | Amount                  |
| Financial put options  | \$ 30,589 | \$18,380,826          | \$ 41,756 | \$ 1,200              | \$ (11,167)             |
| Financial call options | 30,610    | 1,069                 | (22,218)  | 874                   | 52,828                  |

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, 2021, and December 31, 2020 are as follows:

| Fair Value as of   | December 31, 2021 | December 31, 2020 | Change         |  |
|--------------------|-------------------|-------------------|----------------|--|
| Swaps, gain/(loss) | \$ (300,894)      | \$8,314,388       | \$ (8,615,282) |  |

|                     | Change in<br>Fair Value |              |                               |                |
|---------------------|-------------------------|--------------|-------------------------------|----------------|
| Type of Swap        | Notional Value          | Fair Value   | Counterparty<br>Credit Rating | Amount         |
| Credit Default Swap | \$ 70,195,750           | \$2,214,075  | NR *                          | \$ (567,137)   |
| Credit Default Swap | 70,195,750              | -            | NR *                          | -              |
| Inflation Swap      | 47,140,000              | 271,637      | NR *                          | 271,637        |
| Inflation Swap      | 47,140,000              | (162,404)    | NR *                          | (162,404)      |
| Interest Rate Swap  | -                       | -            | А                             | (951,463)      |
| Interest Rate Swap  | 778,793,025             | 1,563,324    | NR *                          | (3,018,389)    |
| Interest Rate Swap  | 778,793,025             | (4,187,526)  | NR *                          | (4,187,526)    |
| Total               | \$ 1,792,257,550        | \$ (300,894) |                               | \$ (8,615,282) |

| As of December 31, 2020 |                  |              |                               |  |  |  |  |
|-------------------------|------------------|--------------|-------------------------------|--|--|--|--|
| Type of Swap            | Notional Value   | Fair Value   | Counterparty<br>Credit Rating |  |  |  |  |
| Credit Default Swap     | \$ 90,766,000    | \$ 2,781,212 | NR *                          |  |  |  |  |
| Credit Default Swap     | 90,766,000       | -            | NR *                          |  |  |  |  |
| Inflation Swap          | -                | -            | NR *                          |  |  |  |  |
| Inflation Swap          | -                | -            | NR *                          |  |  |  |  |
| Interest Rate Swap      | 50,379,000       | 951,463      | А                             |  |  |  |  |
| Interest Rate Swap      | 50,379,000       | -            | А                             |  |  |  |  |
| Interest Rate Swap      | 609,640,000      | 4,581,713    | NR *                          |  |  |  |  |
| Interest Rate Swap      | 609,640,000      | -            | NR *                          |  |  |  |  |
| Total                   | \$ 1,501,570,000 | \$ 8,314,388 |                               |  |  |  |  |

 $NR* = Not \ rated.$ 

#### G. FUTURE INVESTMENT COMMITMENTS

At December 31, 2021 and December 31, 2020, IMRF had future commitments for additional contributions to real estate and alternative investment managers totaling \$3,968,250,954 and \$3,812,836,918, respectively.



#### H. FAIR VALUE MEASUREMENT

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

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

The three hierarchy categories are as follows:

- Level 1: Investments reflect prices quoted in active markets for identical assets.
- Level 2: Investments reflect prices that are based on a similar observable asset either directly or indirectly in an active market, and inputs in markets are not considered to be active for identical or similar assets.
- Level 3: Investments reflect prices based on unobservable inputs 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.

The securities lending cash collateral investment pool and short-term investments consists of money market funds, certificates of deposit, and highly liquid cash equivalents. They 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 through 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, 2021, and December 31, 2020.

|  | As of December 31, 2021       |                   |                   |                   |                                |  |
|--|-------------------------------|-------------------|-------------------|-------------------|--------------------------------|--|
|  | Fair Value Measurements Using |                   |                   |                   |                                |  |
|  | Fair Value                    | Level 1<br>Inputs | Level 2<br>Inputs | Level 3<br>Inputs | Investments<br>Measured at NAV |  |
| U.S. government & agency fixed income  | \$ 3,893,544,474              | \$ 1,978,682,405  | \$ 1,826,022,810  | \$ 88,839,259     | \$ -                           |  |
| U.S. corporate fixed income            | 3,786,403,517                 | -                 | 3,561,450,193     | 224,953,324       | -                              |  |
| U.S. fixed income funds                | 3,746,668,113                 | -                 | 1,817,007,757     | -                 | 1,929,660,356                  |  |
| Foreign fixed income funds             | 1,515,399,018                 | -                 | 774,983,723       | 6,328,188         | 734,087,107                    |  |
| Fixed income                           | 12,942,015,122                | 1,978,682,405     | 7,979,464,483     | 320,120,771       | 2,663,747,463                  |  |
| U.S. equities                          | 19,299,332,907                | 19,286,211,134    | 4,279,246         | 8,842,527         | -                              |  |
| U.S. equity funds                      | 3,809,185,342                 | 3,809,185,342     | -                 | -                 | -                              |  |
| Foreign equities                       | 7,667,238,765                 | 7,667,238,001     | -                 | 764               | -                              |  |
| Foreign equity funds                   | 3,402,760,223                 | 3,402,760,223     | -                 | -                 | -                              |  |
| Equity                                 | 34,178,517,237                | 34,165,394,700    | 4,279,246         | 8,843,291         | -                              |  |
| Real estate                            | 4,440,105,815                 | -                 | -                 | 175,037,106       | 4,265,068,709                  |  |
| Private equity                         | 4,989,950,351                 | -                 | -                 | 250,573,271       | 4,739,377,080                  |  |
| Absolute return funds                  | 108,373                       | -                 | -                 | -                 | 108,373                        |  |
| Options                                | 61,199                        | 61,199            | -                 | -                 | -                              |  |
| Swaps                                  | (300,894)                     | -                 | (300,894)         | -                 | -                              |  |
| Investments measured at fair value     | \$ 56,550,457,203             | \$36,144,138,304  | \$ 7,983,442,835  | \$ 754,574,439    | \$ 11,668,301,625              |  |
| Investments measured at amortized cost | 735,982,794                   |                   |                   |                   |                                |  |
| Total                                  | \$ 57,286,439,997             |                   |                   |                   |                                |  |

|  | Investments measured at Net Asset Value (NAV) |                         |  |                             |  |  |
|--|---|-------------------------|--|-----------------------------|--|--|
| Year Ended<br>December 31, 2021            | Fair Value                                    | Unfunded<br>Commitments | Redemption<br>Frequency<br>(if currently eligible) | Redemption<br>Notice Period |  |  |
| U.S. fixed income funds                    | \$ 1,929,660,356                              | \$ -                    | Daily  | 0-2 Days                    |  |  |
| Foreign fixed income                       | 734,087,107                                   | -                       | Daily  | 30 Days                     |  |  |
| <b>Commingled Fixed Income Funds Total</b> | 2,663,747,463                                 | -                       |  |                             |  |  |
| Real estate                                | 4,265,068,709                                 | 1,581,765,523           | Quarterly, Not Eligible                            | 30-60 days, N/A             |  |  |
| Private equity                             | 4,739,377,080                                 | 2,386,485,431           | Quarterly, Not Eligible                            | 60 days, N/A                |  |  |
| Absolute return funds                      | 108,373                                       | -                       | Monthly, Quarterly                                 | Notice in Place             |  |  |
| Investments measured at NAV                | \$11,668,301,625                              | \$3,968,250,954         | _  |                             |  |  |



|  | As of December 31, 2020       |                   |                   |                   |                                |  |
|--|-------------------------------|-------------------|-------------------|-------------------|--------------------------------|--|
|  | Fair Value Measurements Using |                   |                   |                   |                                |  |
|  | Fair Value                    | Level 1<br>Inputs | Level 2<br>Inputs | Level 3<br>Inputs | Investments<br>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<br>December 31, 2020     | Fair Value                                    | Unfunded<br>Commitments | Redemption<br>Frequency<br>(if currently eligible) | Redemption<br>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         |  |                             |  |  |

#### 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 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, income and liquidity. The role of private 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 strategy. The alternatives investment portfolio's objective is to achieve an annualized return of 9%. The alternative 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 an agent multiple 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.

#### B. BENEFITS PROVIDED

IMRF has three benefit plans. 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 10 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 10 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. IMRF EMPLOYEES COVERED BY BENEFIT TERMS

As of December 31, 2021 and December 31, 2020, the following employees were covered by the benefit terms:

|  | 2021 | 2020 |
|--|------|------|
| Retirees and Beneficiaries currently receiving benefits          | 193  | 178  |
| Inactive Plan Members entitled to but not yet receiving benefits | 65   | 66   |
| Active Plan Members  | 211  | 214  |
| Total  | 469  | 458  |

#### D. CONTRIBUTIONS

As set by statute, 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 2021 and 2020 was 10.40% and 10.67% respectively. For the fiscal year ended December 31, 2021 and December 31, 2020, IMRF contributed \$1,825,082 and \$1,943,590 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 ASSET/LIABILITY

IMRF's net pension (asset)/liability was measured as of December 31, 2021 and December 31, 2020. The total pension liability used to calculate the net pension (asset)/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, 2021 and December 31, 2020:

| Actuarial Cost Method     | Entry-Age Normal  |
|---------------------------|---|
| Asset Valuation Method    | Market Value of Assets  |
| Inflation Rate            | 2.25%   |
| Salary Increases          | 2.85% to 13.75%, 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                         |
| Mortality                 |   |
| Non-Disabled Retirees     | 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 |
| Disabled Retirees         | 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.               |
| Active Members            | Pub-2010, Amount-Weighted, below-median income, General, Employee, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2020.                       |

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, 2021 and December 31, 2020:

|                         | 202                            | 21  | 202                            | .0  |
|-------------------------|--------------------------------|---|--------------------------------|---|
|                         | Portfolio Target<br>Percentage | Long-Term<br>Expected<br>Real Rate of<br>Return | Portfolio Target<br>Percentage | Long-Term<br>Expected<br>Real Rate of<br>Return |
| Domestic Equity         | 39%                            | 1.90%   | 37%                            | 2.85%   |
| International Equity    | 15%                            | 3.15%   | 18%                            | 3.85%   |
| Fixed Income            | 25%                            | (0.60)%   | 28%                            | (0.85)%   |
| Real Estate             | 10%                            | 3.30%   | 9%                             | 4.05%   |
| Alternative Investments | 10%                            | 1.70-5.50%                                      | 7%                             | 0.70-4.80%                                      |
| Cash Equivalents        | 1%                             | (0.90)%   | 1%                             | (1.45)%   |
| Total                   | 100%                           |   | 100%                           | -   |

#### 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. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive



employees. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability. 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%, the municipal bond rate is 1.84% and 2.00% as of December 31, 2021 and December 31, 2020 respectively, and the resulting single discount rate is 7.25% as of both December 31, 2021 and December 31, 2020.

#### 4. CHANGES IN THE NET PENSION LIABILITY

|   | Total Pension<br>Liability                   | Plan Fiduciary<br>Net Position       | Net Pension<br>Liability                 |
|---|--|--------------------------------------|--|
|   | (A)  | (B)                                  | (A)-(B)                                  |
| Balances at December 31, 2019   | \$94,542,752                                 | \$88,423,090                         | \$6,119,662                              |
| Changes for the year:   |  |                                      |  |
| 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                                |
| Changes for the year:   |  |                                      |  |
| Service Cost  | 1,651,203                                    | -                                    | 1,651,203                                |
| Interest on the Total Pension Liability   | 7,062,415                                    | -                                    | 7,062,415                                |
| Changes of Benefit Terms  | -  | -                                    | -  |
| Differences Between Expected and Actual Experience of the   | (148,957)                                    |                                      | (140.057)                                |
| Total Pension Liability   | (140,937)                                    | -                                    | (148,957)                                |
| Changes of Assumptions  | - (140,937)                                  | -                                    | (148,957)                                |
| ,   | -  | -<br>1,863,644                       | (1,863,644)                              |
| Changes of Assumptions  |  | -<br>1,863,644<br>799,505            | -  |
| Changes of Assumptions Contributions - Employer   | (146,937)<br>-<br>-<br>-                     |                                      | -<br>(1,863,644)                         |
| Changes of Assumptions Contributions - Employer Contributions - Employees   | (148,937)<br>-<br>-<br>-<br>-<br>(5,420,913) | 799,505                              | -<br>(1,863,644)<br>(799,505)            |
| Changes of Assumptions Contributions - Employer Contributions - Employees Net Investment Income   | -<br>-<br>-                                  | 799,505<br>16,608,903                | -<br>(1,863,644)<br>(799,505)            |
| Changes of Assumptions Contributions - Employer Contributions - Employees Net Investment Income Benefit Payments, including Refunds of Employee Contributions | -<br>-<br>-                                  | 799,505<br>16,608,903<br>(5,420,913) | (1,863,644)<br>(799,505)<br>(16,608,903) |

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

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

|                               | December 31, 2021                       |                     |                 |  |  |  |
|-------------------------------|---|---------------------|-----------------|--|--|--|
|                               | Current Single Discount Rate Assumption |                     |                 |  |  |  |
|                               | 1% Decrease (6.25%)                     | 1% Increase (8.25%) |                 |  |  |  |
| Total Pension Liability       | \$ 113,883,084                          | \$ 102,441,221      | \$ 93,293,805   |  |  |  |
| Plan Fiduciary Net Position   | 112,412,528                             | 112,412,528         | 112,412,528     |  |  |  |
| Net Pension Liability/(Asset) | \$ 1,470,556                            | \$ (9,971,307)      | \$ (19,118,723) |  |  |  |

|                               | December 31, 2020                                      |               |                |  |  |  |  |
|-------------------------------|--|---------------|----------------|--|--|--|--|
|                               | Current Single Discount Rate Assumption                |               |                |  |  |  |  |
|                               | 1% Decrease (6.25%) Current Rate (7.25%) 1% Increase ( |               |                |  |  |  |  |
| 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) |  |  |  |  |

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

For the year ended December 31, 2021 and December 31, 2020, IMRF recognized pension (income)/expense of \$(2,117,987) and \$84,163 respectively. At December 31, 2021 and December 31, 2020, IMRF reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

|  | As of Decemb  | er 31, 2021                   | As of December 31, 2020        |                               |  |
|--|---|-------------------------------|--------------------------------|-------------------------------|--|
|  | Deferred Outflows of Resources  | Deferred Inflows of Resources | Deferred Outflows of Resources | Deferred Inflows of Resources |  |
| Deferred Amounts to be Recogn  | Deferred Amounts to be Recognized in Pension Expense in Future Period |                               |                                |                               |  |
| Differences between expected and actual experience                               | \$ 2,217,866  | \$ 117,498                    | \$ 3,369,323                   | \$ -                          |  |
| Changes of assumptions   | 490,730   | 515,816                       | 963,086                        | 1,169,174                     |  |
| Net difference between projected and actual earnings on pension plan investments | -   | 12,850,437                    | -                              | 7,590,017                     |  |
| Total  | \$ 2,708,596  | \$ 13,483,751                 | \$ 4,332,409                   | \$ 8,759,191                  |  |

As of December 31, 2021 and December 31, 2020, 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:

| Year E     | Year Ending December 31, 2021         |  |  |
|------------|---------------------------------------|--|--|
|            | Net Deferred Outflows of<br>Resources |  |  |
| 2022       | \$(1,558,136)                         |  |  |
| 2023       | (4,268,685)                           |  |  |
| 2024       | (3,015,314)                           |  |  |
| 2025       | (1,933,020)                           |  |  |
| 2026       | -                                     |  |  |
| Thereafter | -                                     |  |  |
| Total      | \$(10,775,155)                        |  |  |

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



#### 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 meets 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, 2021 and 2020:

|  | 2021 | 2020 |
|--|------|------|
| Inactive employees or beneficiaries currently receiving benefits | 26   | 24   |
| Inactive employees entitled to but not yet receiving benefits    | 0    | 0    |
| Active employees   | 210  | 212  |
| Total  | 236  | 236  |

#### 2. TOTAL OPEB LIABILITY

IMRF's total OPEB liability of \$2,543,618 and \$2,353,042 was measured as of December 31, 2021 and 2020, respectively, and was determined by an actuarial valuation as of those dates.

The total OPEB liability in the December 31, 2021 and December 31, 2020 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           | 2021 - 1.84% 2020 - 2.00% 2019 - 2.75%  |
| Price Inflation         | 2021 - 2.25% 2020 - 2.50% 2019 - 2.50%  |
| Wage Inflation          | 2021 - 2.75% 2020 - 3.25% 2019 - 3.25%  |
| Salary Increases        | 2020 and 2019 - 3.39% to 10.35%, includes wage inflation<br>2021 - 2.85% to 9.85%, includes wages 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, 2019 (December 31, 2016 for the 2020 and 2019 valuations) as conducted for the Illinois Municipal Retirement System.   |
| Mortality               |   |
| Active members*         | 2021 - Pub-2010, Amount-Weighted, below-median income, General, Employee, Male and Female tables, and future mortality improvements projected using scale MP-2020. 2020 and 2019 - IMRF specific mortality rates with 2-dimensional, fully generational improvements using MP-2017 (base year 2015) Mortality Improvement Scale.                                |
| Retirees*               | 2021 - 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. 2020 and 2019 - IMRF specific mortality rates with 2-dimensional, fully generational improvements using MP-2017 (base year 2015) Mortality Improvement Scale. |
| Disability*             | 2021 - Pub-2010, Amount-Weighted, below-median income, General, Disabled Retiree, Male (adjusted 100%) and Female tables, and future mortality improvements projected using scale MP-2020. 2020 and 2019 - Based on the experience study covering the three year period ending December 31, 2016 as conducted for the Illinois Municipal Retirement Fund.       |
|                         |   |
| Health Care Trend Rates | 2021 - Initial trend of 7.50% gradually decreasing to an ultimate trend rate of 3.50% in year 12 $2020$ and $2019$ - 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"   |

<sup>\*</sup>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

|  | 2021         | 2020         |
|--|--------------|--------------|
| Total OPEB Liability – Beginning of the Year       | \$ 2,353,042 | \$ 2,147,099 |
| Service Cost                                       | 137,431      | 117,971      |
| Interest on the Total OPEB Liability               | 46,924       | 58,602       |
| Changes of Benefit Terms                           | -            | -            |
| Differences Between Expected and Actual Experience | 83,035       | (30,919)     |
| Changes in Assumptions                             | 74,291       | 210,501      |
| Benefit Payments                                   | (151,105)    | (150,212)    |
| Net Changes  | 190,576      | 205,943      |
| Total OPEB Liability – End of the Year             | \$2,543,618  | \$ 2,353,042 |

#### A. SENSITIVITY OF THE TOTAL OPEB LIABILITY TO CHANGES IN THE DISCOUNT RATE

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 1 percentage point from the current discount rate:

|      | Total OPEB Liability                |             |       |             |       |             |
|------|-------------------------------------|-------------|-------|-------------|-------|-------------|
|      | Current Single Discount Rate        |             |       |             |       |             |
|      | 1% Decrease Assumptions 1% Increase |             |       |             |       | crease      |
|      | Rate                                | Amount      | Rate  | Amount      | Rate  | Amount      |
| 2021 | 0.84%                               | \$2,681,552 | 1.84% | \$2,543,618 | 2.84% | \$2,407,550 |
| 2020 | 1.00%                               | \$2,479,336 | 2.00% | \$2,353,042 | 3.00% | \$2,226,562 |

## 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 1 percentage point from the current health-care cost trend rates:

|      | Total OPEB Liability                          |             |             |  |  |
|------|---|-------------|-------------|--|--|
|      | Current Health Care Cost                      |             |             |  |  |
|      | 1% Decrease Trend Rate Assumption 1% Increase |             |             |  |  |
| 2021 | \$2,325,692                                   | \$2,543,618 | \$2,793,773 |  |  |
| 2020 | \$2,137,925                                   | \$2,353,042 | \$2,600,021 |  |  |

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

For the years ended December 31, 2021 and December 31, 2020, IMRF recognized OPEB expense of \$190,506 and \$165,610 respectively. At December 31, 2021 and December 31, 2020, IMRF reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

|  | December 31, 2021              |                               | December 31, 2020              |                               |  |
|--|--------------------------------|-------------------------------|--------------------------------|-------------------------------|--|
|  | Deferred Outflows of Resources | Deferred Inflows of Resources | Deferred Outflows of Resources | Deferred Inflows of Resources |  |
| Differences between expected and actual experience | \$ -                           | \$ 259,577                    | \$ -                           | \$ 399,866                    |  |
| Changes in assumptions or other inputs             | 400,967                        | -                             | 390,081                        | -                             |  |
| Total  | \$400,967                      | \$259,577                     | \$390,081                      | \$399,866                     |  |

As of December 31, 2021, the amounts reported as deferred outflows and inflows of resources related to OPEB will be recognized in OPEB expense as follows:

| As                                    | of December 31, 2021 | As         | of December 31, 2020                |  |
|---------------------------------------|----------------------|------------|-------------------------------------|--|
| Net Deferred Outflows of<br>Resources |                      | Ne         | t Deferred Outflows of<br>Resources |  |
| 2022                                  | \$ 6,151             | 2021       | \$ (10,963)                         |  |
| 2023                                  | 6,151                | 2022       | (10,963)                            |  |
| 2024                                  | 6,151                | 2023       | (10,963)                            |  |
| 2025                                  | 6,151                | 2024       | (10,963)                            |  |
| 2026                                  | 11,574               | 2025       | (10,963)                            |  |
| Thereafter                            | 105,212              | Thereafter | Thereafter 45,030                   |  |
| Total                                 | \$ 141,390           | ,          | \$ (9,785)                          |  |

#### 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. As of December 31, 2021 and December 31, 2020, retirement reserves exceeded the present value of expected retirement benefits for all employers combined by \$6,772,502,765 and \$1,648,973,708, respectively.

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

|   | 2021              | 2020              |  |  |
|---|-------------------|-------------------|--|--|
| Member Contribution Reserve             |                   |                   |  |  |
| Balance at December 31                  | \$ 7,723,735,649  | \$ 7,590,709,546  |  |  |
| Annuity Reserve                         |                   |                   |  |  |
| Balance at December 31                  | \$ 29,173,126,705 | \$ 27,251,813,875 |  |  |
| Employer Reserves                       |                   |                   |  |  |
| Retirement contribution reserve         | 20,469,641,864    | 15,288,652,827    |  |  |
| Earnings and experience reserve         | 314,794,930       | 420,791,897       |  |  |
| Supplemental retirement benefit reserve | 1,536,978         | 1,262,007         |  |  |
| Death benefit reserve                   | 9,209,428         | 9,780,975         |  |  |
| Disability benefit reserve              | 8,008,221         | 8,911,320         |  |  |
| Balance at December 31                  | \$ 20,803,191,421 | \$ 15,729,399,026 |  |  |



#### 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, 2021 |              |           |                |
|---|------------------------------|--------------|-----------|----------------|
|   | Beginning Balance            | Additions    | Deletions | Ending Balance |
| Capital Assets                          |                              |              |           |                |
| Leasehold improvements                  | \$ 1,264,450                 | \$ 175,411   | \$ -      | \$ 1,439,861   |
| Furniture and equipment                 | 14,608,744                   | 1,090,628    | -         | 15,699,372     |
| Software                                | 13,364,359                   | -            | -         | 13,364,359     |
| Total in service                        | 29,237,553                   | 1,266,039    | -         | 30,503,592     |
| Software under development              | 40,334,588                   | 10,142,464   | -         | 50,477,052     |
| Total ending balance                    | 69,572,141                   | 11,408,503   | -         | 80,980,644     |
| Accumulated Depreciation & Amortization |                              |              |           |                |
| Leasehold improvements                  | 838,877                      | 150,987      | -         | 989,864        |
| Furniture and equipment                 | 11,146,189                   | 2,163,333    | -         | 13,309,522     |
| Software                                | 9,346,696                    | -            | -         | 9,346,696      |
| Ending balance                          | 21,331,762                   | 2,314,320    | -         | 23,646,082     |
| Capital Assets, net                     | \$ 48,240,379                | \$ 9,094,183 | -         | \$57,334,562   |

|   | 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                   | 12,460,088    | -          | 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       | <u>-</u>   | 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                | \$ 11,866,403 | \$ (8,626) | \$48,240,379   |  |

#### 2. PREPAID EXPENSES

|  | 2021           | 2020           |
|--|----------------|----------------|
| Prepaid administrative expenses                        | \$ 3,312,558   | \$ 2,555,459   |
| GASB 68 net pension asset                              | 9,971,307      | -              |
| January 1 benefits charged to bank account in December | 200,113,158    | 186,746,536    |
| Balance at December 31                                 | \$ 213,397,023 | \$ 189,301,995 |

#### 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, 2021, a liability existed for accumulated annual leave calculated at the employee's December 31, 2021 pay rate in the amount of \$1,091,899. 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, 2021, a liability existed for accumulated and accrued sick leave, calculated at the employee's December 31, 2021 pay rate in the amount of \$2,939,330. The total leave liability of \$4,453,214 and \$4,897,984 as of December 31, 2021, and December 31, 2020, 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 extending 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 2021 and 2020 was \$1,064,439 and \$1,031,258, 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 2021 and 2020 was \$60,509 and \$65,049, respectively.

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

| 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.

#### 7. SUBSEQUENT EVENTS

Subsequent to year-end, IMRF's investment portfolio has incurred a significant decline in fair value, consistent with the general decline in the financial markets worldwide. However, because the values of individual investments fluctuate with market conditions, the amount of losses that will be recognized in subsequent periods, if any, cannot be determined.



#### **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,  | 2021           | 2020          | 2019          |
|---|----------------|---------------|---------------|
| Total Pension Liability   |                |               |               |
| Service Cost  | \$ 1,651,203   | \$ 1,607,047  | \$ 1,513,237  |
| Interest on the Total Pension Liability   | 7,062,415      | 6,736,777     | 6,323,492     |
| Changes of Benefit Terms  | -              | -             | -             |
| Differences Between Expected and Actual Experience of the Total Pension Liability | (148,957)      | 2,020,379     | 2,443,448     |
| Changes of Assumptions  | -              | (759,061)     | -             |
| Benefit Payments, including Refunds of Employee Contributions                     | (5,420,913)    | (4,850,421)   | (4,402,776)   |
| Net Change in Total Pension Liability   | 3,143,748      | 4,754,721     | 5,877,401     |
| Total Pension Liability - Beginning   | 99,297,473     | 94,542,752    | 88,665,351    |
| Total Pension Liability - Ending (A)  | \$ 102,441,221 | \$ 99,297,473 | \$ 94,542,752 |
| Plan Fiduciary Net Position   |                |               |               |
| Contributions - Employer  | \$ 1,863,644   | \$ 1,977,839  | \$ 1,461,295  |
| Contributions - Employees   | 799,505        | 811,431       | 734,433       |
| Net Investment Income   | 16,608,903     | 12,683,764    | 14,073,185    |
| Benefit Payments, including Refunds of Employee<br>Contributions                  | (5,420,913)    | (4,850,421)   | (4,402,776)   |
| Other (Net Transfers)   | (377,387)      | (106,927)     | 1,176,751     |
| Net Change in Plan Fiduciary Net Position   | 13,473,752     | 10,515,686    | 13,042,888    |
| Plan Fiduciary Net Position - Beginning   | 98,938,776     | 88,423,090    | 75,380,202    |
| Plan Fiduciary Net Position - Ending (B)  | \$ 112,412,528 | \$ 98,938,776 | \$ 88,423,090 |
| Net Pension (Asset)/Liability - Ending (A) - (B)                                  | \$ (9,971,307) | \$ 358,697    | \$ 6,119,662  |
| Plan Fiduciary Net Position as a Percentage of the Total Pension Liability        | 109.73%        | 99.64%        | 93.53%        |
| Covered Valuation Payroll   | \$ 17,766,731  | \$ 18,031,700 | \$ 16,320,688 |
| Net Pension (Asset)/Liability as a Percentage of Covered Valuation Payroll        | (56.12)%       | 1.99%         | 37.50%        |

#### 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   | \$<br>1,482,033  | \$<br>1,479,003  | \$<br>1,365,350  | \$<br>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  | \$<br>82,155,024 | \$<br>80,437,074 | \$<br>76,595,258 | \$<br>71,586,464 |
|    |             |                  |                  |                  |                  |
| \$ | 1,727,695   | \$<br>1,633,408  | \$<br>1,618,248  | \$<br>1,525,536  | \$<br>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  | \$<br>80,262,110 | \$<br>70,204,443 | \$<br>66,609,317 | \$<br>67,123,676 |
| \$ | 13,285,149  | \$<br>1,892,914  | \$<br>10,232,631 | \$<br>9,985,941  | \$<br>4,462,788  |
|    | 85.02%      | 97.70%           | 87.28%           | 86.96%           | 93.77%           |
| \$ | 15,370,885  | \$<br>14,929,525 | \$<br>14,459,727 | \$<br>13,676,803 | \$<br>12,772,451 |
|    | 86.43%      | 12.68%           | 70.77%           | 73.01%           | 34.94%           |

#### 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<br>Determined<br>Contribution | Actual<br>Contribution | Contribution<br>Deficiency (Excess) | Covered Valuation<br>Payroll | Actual Contribution as<br>a Percentage of<br>Covered Valuation Payroll |
|---------------|---|------------------------|-------------------------------------|------------------------------|--|
| 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  |
| 2021          | 1,847,740                                 | 1,863,644              | (15,904)                            | 17,766,731                   | 10.49  |

#### 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 |        |        |         |        |       |       |       |        |        |
|---|--------|--------|---------|--------|-------|-------|-------|--------|--------|
| 2021 2020 2019 2018 2017 2016 2015 2014 2013 2012                 |        |        |         |        |       | 2012  |       |        |        |
| 17.02%  | 15.20% | 19.82% | (4.25)% | 15.69% | 7.81% | 0.50% | 6.19% | 20.15% | 13.18% |

# SCHEDULE OF CHANGES IN THE TOTAL OPEB LIABILITY AND RELATED RATIOS\*\*

| Total OPEB Liability   | 2021         | 2020         | 2019         | 2018         | 2017         |
|--|--------------|--------------|--------------|--------------|--------------|
| Service Cost   | \$ 137,431   | \$ 117,971   | \$ 101,836   | \$ 119,612   | \$ 112,513   |
| Interest on the Total OPEB Liability                             | 46,924       | 58,602       | 72,003       | 74,519       | 84,042       |
| Changes of Benefit Terms   | -            | -            | -            | -            | -            |
| Differences Between Expected and Actual Experience               | 83,035       | (30,919)     | (10,076)     | (393,995)    | (174,577)    |
| Changes of Assumptions   | 74,291       | 210,501      | 165,579      | 23,037       | 103,110      |
| Health Insurance Subsidy Payments *                              | (151,105)    | (150,212)    | (144,210)    | (105,440)    | (95,870)     |
| Net Change in the Total OPEB<br>Liability                        | 190,576      | 205,943      | 185,132      | (282,267)    | 29,218       |
| Total OPEB Liability - Beginning                                 | 2,353,042    | 2,147,099    | 1,961,967    | 2,244,234    | 2,215,016    |
| Total OPEB Liability – Ending                                    | \$ 2,543,618 | \$ 2,353,042 | \$ 2,147,099 | \$ 1,961,967 | \$ 2,244,234 |
| Covered Employee Payroll   | \$17,866,862 | \$17,523,905 | \$17,067,031 | \$15,549,200 | \$15,627,422 |
| Total OPEB Liability as a Percentage of Covered Employee Payroll | 14.24%       | 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.)

<sup>\*</sup> Includes an adjustment for any implicit rate subsidy present in the pre-65 rates.

<sup>\*\*</sup> There are no assets accumulated in a trust that meets the criteria of GASB codification P52.101 to pay related benefits for the OPEB Plan.

## NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

# SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS USED IN THE CALCULATION OF THE 2021 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 2021 Contribution Rates:  |
| Actuarial Cost Method:         | Aggregate entry age normal   |
| Amortization Method:           | Level percentage of payroll, closed  |
| Remaining Amortization Period: | 22-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.  |
|                                | 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.       |
| 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.  |

<sup>\*</sup> Based on Valuation Assumptions used in the December 31, 2019, actuarial valuation; note two year lag between valuation and rate setting.



# 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    | ed 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.  |
|                                | 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.       |
| 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.  |

<sup>\*</sup> Based on Valuation Assumptions used in the December 31, 2018, 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 |       |       |       |
|-------|-------|---------------|-------|-------|-------|
| 2021  | 2020  | 2019          | 2018  | 2017  | 2016  |
| 1.84% | 2.00% | 2.75%         | 3.71% | 3.31% | 3.78% |

#### **SUPPLEMENTARY INFORMATION**

| Schedule of Administrative Expenses | 2021          | 2020          |
|-------------------------------------|---------------|---------------|
| Personnel services                  | \$ 17,414,376 | \$ 20,744,122 |
| Supplies                            | 325,043       | 393,004       |
| Professional services               | 1,864,046     | 2,034,800     |
| Occupancy and utilities             | 2,425,462     | 2,082,698     |
| Postage and delivery                | 570,460       | 682,333       |
| Equipment service and rental        | 1,943,820     | 1,606,103     |
| Expendable equipment                | 298,203       | 345,843       |
| Miscellaneous                       | 1,162,567     | 1,317,033     |
| Depreciation                        | 2,314,320     | 2,571,019     |
| Total                               | \$ 28,318,297 | \$ 31,776,955 |

| Schedule of Payments for Professional Services | 2021 |           | 2020 |           |
|--|------|-----------|------|-----------|
| Actuary  | \$   | 624,776   | \$   | 668,189   |
| External auditor                               |      | 363,240   |      | 346,790   |
| Modernization consulting                       |      | 464,773   |      | 655,744   |
| Compensation and benefit consultants           |      | 76,437    |      | 68,105    |
| Internal auditing                              |      | 198,438   |      | 158,239   |
| Medical consultant                             |      | 59,364    |      | 28,144    |
| Legal services                                 |      | 2,314     |      | 3,057     |
| Other consulting                               |      | 8,775     |      | 38,275    |
| IT consultants                                 |      | 40,617    |      | 47,312    |
| Hearing officer                                |      | 17,344    |      | 7,173     |
| Tax consultant                                 |      | 6,955     |      | 10,521    |
| Public relations consultant                    |      | 1,013     |      | 3,251     |
| Total  | \$   | 1,864,046 | \$   | 2,034,800 |

| Schedule of Investment Expenses          | 2021 |             | 2020 |             |
|--|------|-------------|------|-------------|
| Investment manager fees                  | \$   | 182,925,249 | \$   | 156,162,145 |
| Equity Internal Management expenses      |      | 799,185     |      | 791,808     |
| Master trustee fees                      |      | 280,000     |      | 280,000     |
| Investment consultants                   |      | 795,000     |      | 854,676     |
| Investment information service providers |      | 1,775,186   |      | 890,730     |
| Investment legal fees                    |      | 143,529     |      | 172,199     |
| Tax preparation fees                     |      | 9,425       |      | 8,085       |
| Miscellaneous                            |      | 16,718      |      | 26,074      |
| Total                                    | \$   | 186,744,292 | \$   | 159,185,717 |

 $\label{lem:assumption} A \textit{ schedule of investment-related fees can be found in the Investments section}.$ 

# MEMBERS & EMPLOYERS HONORING THEIR COMMITTMENTS



IMRF's history of consistent contributions from members and employers has enabled the organization to sustain best-in-class funding levels throughout its 80-year history. Without fail, every IMRF member pays a portion of every paycheck to support their future pensions. And the same is true of the local governments that participate in IMRF. Unlike at many public pensions, IMRF employers are legally required to pay their obligations on time and in full. Because of this Sustainable Success Factor, the pension fund has never missed a pension payment and it never will.

See page 16 for more information about IMRF's revenue sources.



## **INVESTMENTS**

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## **Wilshire**

1299 Ocean Ave, Ste 700 Santa Monica, CA 90401 USA +1 310 451 3051

March 2022

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

Subject: Calendar Year 2021 Investment Performance

Dear Trustees and Mr. Executive Director,

Sharply rising inflation will likely be remembered as the economic story of 2021. Increases in CPI have reached rates not seen in 40 years. Food and energy prices are up meaningfully, but so are the major "core" CPI items of automobiles and apparel. The consumers ability to manage this period will help determine whether the U.S. can continue its economic progress. The employment picture in the United States is quite strong, including an unemployment rate that has fallen to nearly 4% by year-end and continued above-trend growth in wages. However, the personal savings rate has fallen to a level last seen in late-2017, suggesting that consumers are having to save less to adjust for rising prices. Rising inflation and new COVID variants are likely behind the recent decline in overall consumer sentiment.

With that backdrop, investors again enjoyed strong returns out of most financial markets during 2021. The U.S. equity market, as represented by the FT Wilshire 5000 Index was up +26.7% during 2021. The international equity market, marked by the MSCI ACWI ex-U.S. Index, was up +7.8% with mixed results from developed markets (+11.8%) and emerging markets (-2.2%), during the year. Fixed income returns, particularly, duration-based fixed income assets, were challenged during 2021 as the yield curve rose throughout much of the year. As measured by the Bloomberg U.S. Aggregate Index, core fixed income was down -1.5% in 2021. Finally, real assets and energy investors benefited from rising inflation and rising commodity prices. The Bloomberg Commodity Index was up 27.1% during 2021 and the Wilshire Global RESI Index returned +34.1%.

The Illinois Municipal Retirement Fund ("IMRF") ended calendar year 2021 at \$56.8 billion, up for the year by approximately \$6.9 billion, net of benefit payments and fund expenses.

The IMRF Total Fund returned +16.6% net of fees during 2021, outperforming the Total Fund Benchmark, which was returned +13.5%. Strong investment manager outperformance within Alternatives, International Equity and Fixed Income were the largest contributors to relative outperformance for the year. Additionally, the Portfolio's overweight to U.S. Equity and underweight to Fixed Income benefited relative outperformance during 2021.

On a gross of fee basis, the IMRF Total Fund ranked at the  $32^{nd}$  Percentile during 2021 in the InvestmentMetrics All Public Plans with AUM Greater than \$1 Billion Universe. Over the trailing three- and five-years, IMRF ranked at the  $13^{th}$  Percentile and  $15^{th}$  Percentile, respectively.

The IMRF U.S. Equity Portfolio returned +24.7%, net of fees, during 2021, trailing the Russell 3000 Index which returned +25.7%. Relative to peers, the U.S. Equity Portfolio ranked at the 39<sup>th</sup> Percentile.

Within International Equity, the IMRF Portfolio returned +9.4%, net of fees, during the year, outperforming the MSCI ACWI ex-U.S. Index, which was up +7.8%. Relative to peers, the IMRF International Equity Portfolio ranked at the 48 th Percentile over the one-year period ending December 31, 2021.

## Wilshire

The IMRF Fixed Income Portfolio benefited from diversification during 2021, as the Portfolio's dedicated allocations to high yield bonds and bankloans returned +6.6% and +6.2%, respectively. Overall, the Fixed Income Portfolio was down just -0.5%, while the Bloomberg U.S. Aggregate Index was down -1.5% during the year. Relative to peers, the IMRF Fixed Income Portfolio ranked at the  $69^{\text{th}}$  Percentile during the year.

Sincerely,

Calvin Born Jr. Vice President





March 8, 2022

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, 2021 through December 31, 2021. Also, a statement of assets together with their fair market value was provided, showing the properties held as of December 31, 2021. The Northern Trust Company certifies that the statements contained therein are fairly presented and are true and accurate.

In a ddition 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 a ccordance 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 a ccordance 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 Kimberly A. Miller Senior Vice President

#### **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, LP** 

Boston, Massachusetts

**Almanac Realty Investors** 

New York, New York

**Ares Management, LLC** 

London, England

**Arrowstreet Capital, LP** 

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, China

**Barings Capital Management** 

Charlotte, North Carolina

**Baring's LLC** 

Hartford, Connecticut

Beecken Petty O'Keefe & Company, LLC

Chicago, Illinois

**BlackRock Financial Management, Inc.** 

New York, New York

The Blackstone Group LP

New York, New York

**BMO Global Asset Management** 

Chicago, Illinois & Miami, Florida

**BNY Mellon** 

Boston, Massachusetts

**Brandes Investment Partners, LP** 

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, LP** 

Houston, Texas

**Estancia Capital Partners, LP** 

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 Company** 

Boston, Massachusetts

**Garcia Hamilton & Associates, LP** 

Houston, Texas

**Genesis Asset Managers** 

**International, Ltd.** 

London, England

**GlobeFlex Capital, LP** 

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

**ICV Partners** 

New York, New York

# INVESTMENTS IMRE.

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

**IK Investment Partners** 

London, United Kingdom

Inflexion Private Equity Partners, LLP

London, England

**Insight Venture Management, LLC** 

New York, New York

**Invesco Real Estate** 

Dallas, Texas

**Investment Counselors** of Maryland, LLC

Baltimore, Maryland

**JLC** 

Chicago, Illinois

JP Morgan

New York, New York

Kohlberg Kravis Roberts & Co. L.P

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 percent.
- 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 Custom U.S. Equity Benchmark.
- 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 Custom Fixed Income Benchmark.
- 8. To achieve in private real asset investments a return that exceeds the Custom Private Real Assets Benchmark.
- 9. To achieve in alternative investments a return that exceeds the Custom Alternative Investment Benchmark.
- 10. To achieve in internally managed short-term securities relative performance better than 3-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 long-term 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 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 5 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 unless otherwise specified within in individual manager guidelines.

#### E. FIXED INCOME INVESTMENT GUIDELINES

- 1. Bonds, notes or other obligations of indebtedness issued or guaranteed by the U.S. government, its agencies or instrumentalities may be held without restriction.
- 2. The average credit quality of the total fixed income portfolio must be investment grade.
- 3. Debt obligations of any single U.S. corporation shall generally be limited to a maximum of 5% of the total fixed income portfolio at 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.
- 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-the-counter options are subject to individual manager guidelines. Managers are not permitted to utilize these transactions for speculative purposes. Leverage is not allowed except as permitted for rolling mortgage pass-through securities.

8. No assets shall be committed to short sale contracts.

#### F. EQUITY REAL ESTATE INVESTMENT GUIDELINES

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

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

#### G. ALTERNATIVE INVESTMENT GUIDELINES

The Alternative Investment Portfolio will consist of venture capital, buyout, mezzanine, special situation, timber, agriculture, infrastructure, 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.

#### I. DIVERSE INVESTMENT MANAGER GUIDELINES

The Illinois Municipal Retirement Fund is committed to diversity in the hiring of minority owned and emerging investment managers, as defined by the Illinois Pension Code.

A minority investment manager is defined as an investment manager that manages an investment portfolio and meets the definition of "minority owned business", "woman owned business", or "business owned by a person with a disability", as defined in the Business Enterprise for Minorities, Women, and Persons with Disabilities Act. Minority Investment Management firms must be 51% or more owned by individuals that are minorities, women or persons with a disability and are citizens or lawful permanent residents of the United States.

An emerging investment manager is defined as an investment advisor that manages an investment portfolio of at least \$10,000,000 but less than \$10,000,000,000 and is a "minority owned business", "woman owned business", or "business owned by a person with a disability", as defined in the Business Enterprise for Minorities, Women, and Persons with Disabilities Act. Emerging Investment Management firms must be 51% or more owned by individuals that are minorities, women, or persons with a disability and are citizens or lawful permanent residents of the United States.

The IMRF Board of Trustees adopts the following aspirational goals and minority and emerging investment manager goals based on percentage of total Fund fair value, percentage of asset class, and percentage of investment management fees paid.

The Illinois Municipal Retirement Fund Board of Trustees adopts two aspirational goals: (i) to utilize emerging investment managers for at least 20% of the total Fund's assets under management and (ii) to utilize firms owned by minorities, women, and persons with disabilities for at least 20% of the total Fund's assets under management

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

|                                |            |        |        |          |        |        | Annualized |        |
|--------------------------------|------------|--------|--------|----------|--------|--------|------------|--------|
|                                | 2021       | 2020   | 2019   | 2018     | 2017   | 3 Yrs  | 5 Yrs      | 10 Yrs |
| Total Fund Time - Weig         | hted Retur | ns     |        |          |        |        |            |        |
| IMRF - Gross of Fees           | 16.82%     | 14.98% | 19.77% | (4.25)%  | 15.96% | 17.18% | 12.32%     | 10.92% |
| IMRF - Net of Fees             | 16.63%     | 14.79% | 19.57% | (4.41)%  | 15.73% | 16.98% | 12.12%     | 10.70% |
| CPI (Inflation)                | 7.00%      | 1.36%  | 2.29%  | 1.91%    | 2.11%  | 3.57%  | 2.94%      | 2.15%  |
| Equities - U.S.                |            |        |        |          |        |        |            |        |
| IMRF - Gross of Fees           | 24.89%     | 22.07% | 29.23% | (6.08)%  | 19.83% | 25.36% | 17.27%     | 16.06% |
| IMRF - Net of Fees             | 24.69%     | 21.86% | 29.00% | (6.26)%  | 19.60% | 25.15% | 17.05%     | 15.81% |
| Russell 3000                   | 25.66%     | 20.89% | 31.02% | (5.24)%  | 21.13% | 25.79% | 17.97%     | 16.28% |
| Russell 2000                   | 14.82%     | 19.96% | 25.52% | (11.01)% | 14.65% | 20.02% | 12.02%     | 13.23% |
| Equities - Internationa        | ı          |        |        |          |        |        |            |        |
| IMRF - Gross of Fees           | 9.78%      | 13.52% | 23.76% | (14.16)% | 27.91% | 15.54% | 11.12%     | 9.13%  |
| IMRF - Net of Fees             | 9.37%      | 13.08% | 23.39% | (14.41)% | 27.53% | 15.13% | 10.74%     | 8.77%  |
| MSCI ACWI Ex-U.S.              | 7.82%      | 10.65% | 21.51% | (14.20)% | 27.19% | 13.18% | 9.61%      | 7.28%  |
| MSCI EAFE                      | 11.26%     | 7.82%  | 22.01% | (13.79)% | 25.03% | 13.70% | 10.47%     | 8.77%  |
| Fixed Income                   |            |        |        |          |        |        |            |        |
| IMRF - Gross of Fees           | (0.44)%    | 7.87%  | 9.50%  | (0.28)%  | 4.80%  | 5.55%  | 4.22%      | 3.88%  |
| IMRF - Net of Fees             | (0.53)%    | 7.75%  | 9.37%  | (0.41)%  | 4.67%  | 5.44%  | 4.09%      | 3.73%  |
| Bloomberg Aggregate            | (1.55)%    | 7.51%  | 8.72%  | 0.01%    | 3.54%  | 4.79%  | 3.57%      | 2.90%  |
| Bloomberg<br>Government/Credit | (2.50)%    | 8.93%  | 9.71%  | (0.42)%  | 4.00%  | 10.60% | 7.40%      | 5.70%  |
| Merrill Lynch High Yield       | (5.2)%     | 6.21%  | 14.40% | (2.26)%  | 7.48%  | 8.55%  | 6.09%      | 6.69%  |
| Real Estate                    |            |        |        |          |        |        |            |        |
| IMRF - Net of Fees             | 21.88%     | 4.16%  | 9.78%  | 8.36%    | 9.10%  | 11.69% | 10.68%     | 11.15% |
| Real Estate Benchmark          | 21.02%     | 0.34%  | 4.39%  | 7.36%    | 6.66%  | 8.23%  | 7.74%      | 9.61%  |
| Alternative Investmen          | ts         |        |        |          |        |        |            |        |
| IMRF - Gross of Fees           | 46.46%     | 12.31% | 9.48%  | 17.32%   | 12.15% | 21.67% | 18.82%     | 13.49% |
| IMRF - Net of Fees             | 46.44%     | 12.27% | 9.43%  | 17.14%   | 11.97% | 21.62% | 18.72%     | 13.26% |
| Cash & Cash Equivalen          | ts         |        |        |          |        |        |            |        |
| IMRF                           | 2.44%      | 2.56%  | 3.59%  | 2.36%    | 1.67%  | 2.86%  | 2.52%      | 1.40%  |
| U.S. Treasury Bills            | 0.01%      | 0.67%  | 2.28%  | 1.87%    | 0.86%  | 0.99%  | 1.14%      | 0.61%  |

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: Wilshire



#### **SCHEDULE I**

Investment Portfolio Summary (In millions of dollars)

|                            | As of Decer | nber 31, 2021                  | As of Dece  | mber 31, 2020                  |
|----------------------------|-------------|--------------------------------|-------------|--------------------------------|
|                            | Fair Value  | Percent of Total<br>Fair Value | Fair Value  | Percent of Total<br>Fair Value |
| Fixed Income               |             |                                |             |                                |
| Government & Agencies      | \$ 3,893.5  | 6.8%                           | \$ 3,170.2  | 6.3%                           |
| Corporate                  | 3,786.4     | 6.6                            | 3,632.1     | 7.2                            |
| Index Funds                | 3,746.7     | 6.5                            | 3,890.5     | 7.8                            |
| Foreign                    | 1,515.4     | 2.7                            | 1,362.5     | 2.7                            |
| Total Fixed Income         | 12,942.0    | 22.6                           | 12,055.3    | 24.0                           |
| Stocks                     |             |                                |             |                                |
| U.S. Common & Preferred    | 19,299.3    | 33.7                           | 16,379.7    | 32.6                           |
| U.S. Stock Funds           | 3,809.2     | 6.6                            | 4,069.4     | 8.1                            |
| Foreign Common & Preferred | 7,667.2     | 13.5                           | 6,692.1     | 13.3                           |
| Foreign Stock Funds        | 3,402.8     | 5.9                            | 3,567.3     | 7.1                            |
| Total Stocks               | 34,178.5    | 59.7                           | 30,708.5    | 61.1                           |
| Real Estate                | 4,440.1     | 7.8                            | 3,565.7     | 7.1                            |
| Private Equity Investments | 4,990.1     | 8.7                            | 3,209.3     | 6.4                            |
| Short-Term Investments     | 735.7       | 1.2                            | 734.8       | 1.4                            |
| Total Portfolio            | \$ 57,286.4 | 100.0%                         | \$ 50,273.6 | 100.0%                         |

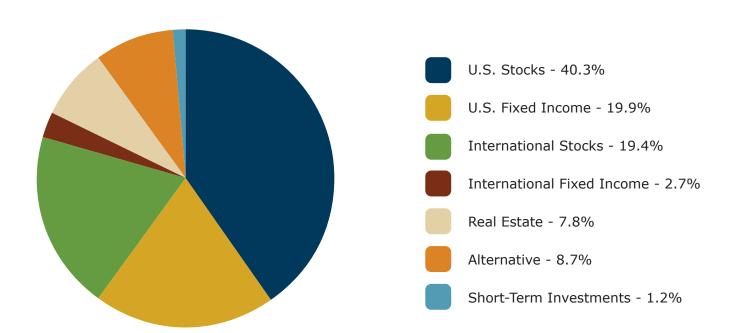
#### **SCHEDULE II**

Asset Allocation (Last five years)

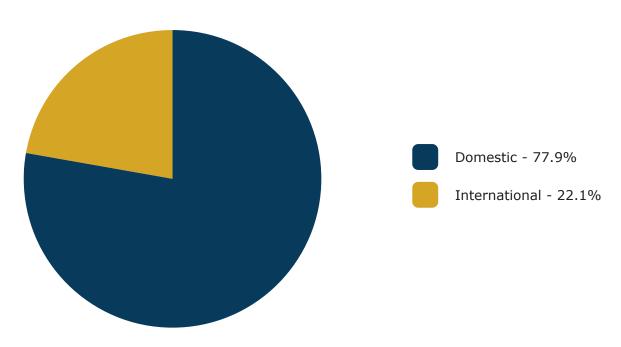
|                            | Fair Value as a Percent of Portfolio |        |        |        |        |  |  |
|----------------------------|--------------------------------------|--------|--------|--------|--------|--|--|
|                            | 2021                                 | 2020   | 2019   | 2018   | 2017   |  |  |
| Fixed Income               |                                      |        |        |        |        |  |  |
| U.S. Government & Agencies | 6.8%                                 | 6.3%   | 8.5%   | 8.9%   | 7.5%   |  |  |
| Corporate                  | 6.6                                  | 7.2    | 8.1    | 8.5    | 7.2    |  |  |
| Index Fund                 | 6.5                                  | 7.8    | 8.1    | 8.6    | 8.1    |  |  |
| Foreign                    | 2.7                                  | 2.7    | 3.0    | 3.5    | 3.4    |  |  |
| Total Fixed Income         | 22.6                                 | 24.0   | 27.7   | 29.5   | 26.2   |  |  |
| Stocks                     |                                      |        |        |        |        |  |  |
| U.S. Common & Preferred    | 33.7%                                | 32.6   | 31.1   | 29.1   | 28.8   |  |  |
| U.S. Stock Funds           | 6.6                                  | 8.1    | 8.6    | 10.6   | 13.9   |  |  |
| Foreign Common & Preferred | 13.5                                 | 13.3   | 11.9   | 11.0   | 12.5   |  |  |
| Foreign Stock Funds        | 5.9                                  | 7.1    | 6.9    | 7.0    | 7.6    |  |  |
| Total Stocks               | 59.7                                 | 61.1   | 58.5   | 57.7   | 62.8   |  |  |
| Real Estate                | 7.8                                  | 7.1    | 7.3    | 7.1    | 6.2    |  |  |
| Private Equity Investments | 8.7                                  | 6.4    | 5.0    | 4.0    | 3.2    |  |  |
| Short-Term Investments     | 1.2                                  | 1.4    | 1.5    | 1.7    | 1.6    |  |  |
| Total Portfolio            | 100.0%                               | 100.0% | 100.0% | 100.0% | 100.0% |  |  |

### IMRF INVESTMENT PORTFOLIO (AS OF DECEMBER 31, 2021)

#### **ALLOCATION BY ASSET CLASS**



#### **TOTAL INVESTMENTS BY REGION**





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

As of December 31, 2021 (Excludes commingled funds and short-term investments)

| Investment Income Holdings                | Fair Value     | Percent of Total<br>Invested Market |
|---|----------------|-------------------------------------|
| U.S. Treasury Bonds 2.25% Due 8/15/2046   | \$ 123,476,407 | 0.22%                               |
| U.S. Treasury Bonds 2.50% Due 5/15/2046   | 99,096,353     | 0.17                                |
| U.S. Treasury Notes 2.375% Due 5/15/2029  | 76,379,859     | 0.13                                |
| U.S. Treasury Notes 2.00% Due 2/15/2025   | 71,091,562     | 0.12                                |
| U.S. Treasury Bonds 1.125% Due 5/15/2040  | 70,780,254     | 0.12                                |
| U.S. Treasury Bonds 1.625% Due 11/15/2022 | 59,121,079     | 0.10                                |
| U.S. Treasury Notes 2.375% Due 08/15/2024 | 55,910,592     | 0.10                                |
| U.S. Treasury Bonds 4.75% Due 2/15/2037   | 55,701,849     | 0.10                                |
| U.S. Treasury Notes 2.375% Due 5/15/2029  | 53,244,122     | 0.09                                |
| U.S. Treasury Notes 2.50% Due 4/15/2023   | 53,180,835     | 0.09                                |
|   | \$717,982,912  | 1.24%                               |

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

| Equity Investment Holdings | Fair Value       | Percent of Total<br>Invested Market |
|----------------------------|------------------|-------------------------------------|
| Apple, Inc.                | \$ 417,977,436   | 0.73%                               |
| Amazon, Inc.               | 280,039,559      | 0.49                                |
| Microsoft, Inc.            | 299,946,644      | 0.52                                |
| Facebook, Inc.             | 185,091,792      | 0.32                                |
| Visa, Inc.                 | 101,380,387      | 0.18                                |
| Netflix, Inc.              | 104,755,624      | 0.18                                |
| Sea, Ltd                   | 136,893,856      | 0.24                                |
| Square, Inc.               | 105,985,310      | 0.19                                |
| Servicenow, Inc.           | 110,088,133      | 0.19                                |
| Adobe, Inc                 | 57,276,638       | 0.10                                |
| Total                      | \$ 1,799,435,379 | 3.14%                               |

## **SCHEDULE OF 2021 DOMESTIC BROKERAGE COMMISSIONS** (In order of commission received)

| Broker Name                              | Total Shares   | Commission      | Per Share |
|--|----------------|-----------------|-----------|
| Loop Capital Markets, LLC                | 11,439,748.00  | \$ 285,229.83   | \$ 0.025  |
| The Northern Trust Company               | 32,668,455.00  | 245,016.49      | 0.008     |
| Blaylock Robert Van, LLC                 | 8,267,805.00   | 243,855.24      | 0.029     |
| Capital Institutional Services, Inc.     | 8,486,816.00   | 216,923.61      | 0.026     |
| Penserra Securities, LLC                 | 6,764,275.00   | 193,765.45      | 0.029     |
| Robert W. Baird & Co., Inc.              | 5,409,522.00   | 185,260.77      | 0.034     |
| Wells Fargo Bank Minnesota, NA           | 5,601,139.00   | 166,291.82      | 0.030     |
| Guggenheim Securities, LLC               | 5,535,213.00   | 159,786.08      | 0.029     |
| North South Capital, LLC                 | 5,213,396.00   | 153,929.04      | 0.030     |
| Rbc Capital Markets, LLC                 | 6,176,110.00   | 139,770.23      | 0.023     |
| Raymond James & Associates, Inc.         | 3,765,097.00   | 127,732.24      | 0.034     |
| CL King                                  | 4,000,577.00   | 117,814.73      | 0.029     |
| Bank of America Corporation              | 5,721,886.00   | 117,726.14      | 0.021     |
| J.P. Morgan Securities, LLC              | 6,798,682.00   | 105,668.87      | 0.016     |
| Keybanc Capital Markets, Inc.            | 2,755,256.00   | 99,747.93       | 0.036     |
| Keefe Bruyette                           | 2,763,383.00   | 91,162.08       | 0.033     |
| Needham And Company, LLC                 | 2,141,048.00   | 81,695.03       | 0.038     |
| William Blair & Company, LLC             | 2,090,331.00   | 77,697.34       | 0.037     |
| Cowen And Company, LLC                   | 1,879,355.00   | 72,721.86       | 0.039     |
| Oppenheimer & Co., Inc.                  | 1,785,516.00   | 70,653.18       | 0.040     |
| Piper Jaffray & Co.                      | 2,108,256.00   | 69,499.84       | 0.033     |
| Stephens, Inc.                           | 1,789,239.00   | 67,659.19       | 0.038     |
| Jonestrading Institutional Services, LLC | 2,228,682.00   | 66,806.31       | 0.030     |
| Stifel, Nicolaus & Company, Inc.         | 2,223,573.00   | 66,396.38       | 0.030     |
| Suntrust Capital Markets, Inc.           | 1,730,629.00   | 65,787.75       | 0.038     |
| Sanford C. Bernstein & Co., LLC          | 10,287,587.00  | 64,129.26       | 0.006     |
| The Williams Capital Group, LP           | 1,969,155.00   | 57,723.54       | 0.029     |
| Cornerstone Macro, LLC                   | 2,743,373.00   | 52,931.00       | 0.019     |
| Leerink Partners, LLC                    | 1,305,603.00   | 52,224.12       | 0.040     |
| Fidelity Capital Markets (Div of NFSC)   | 2,924,349.00   | 50,028.29       | 0.017     |
| Other Brokers                            | 173,574,044.58 | 1,076,745.01    | 0.006     |
| TOTAL                                    | 332,148,100.58 | \$ 4,642,378.65 | \$ 0.014  |



## **SCHEDULE OF 2021 INTERNATIONAL BROKERAGE COMMISSIONS** (*In order of commission received*)

| Broker Name                              | Total Shares     | Commission      | Per Share |
|--|------------------|-----------------|-----------|
| BNY Convergex Execution Solutions        | 14,344,906.00    | \$ 243,968.19   | \$ 0.017  |
| Instinet Europe Limited                  | 13,034,417.00    | 109,326.28      | 0.008     |
| Bank of America Corporation              | 3,211,981.00     | 103,661.53      | 0.032     |
| CLSA Singapore Pte Ltd.                  | 14,057,069.00    | 102,782.62      | 0.007     |
| Morgan Stanley and Co., LLC              | 23,700,127.00    | 102,529.28      | 0.004     |
| UBS Ag London Branch                     | 30,263,695.00    | 91,848.62       | 0.003     |
| CLSA Singapore Pte Ltd.                  | 93,748,815.00    | 90,570.73       | 0.001     |
| Merrill Lynch International Limited      | 34,777,013.00    | 80,304.71       | 0.002     |
| Goldman, Sachs and Co.                   | 8,549,959.00     | 69,640.76       | 0.008     |
| Citigroup Global Markets Europe AG       | 2,415,600.00     | 63,229.06       | 0.026     |
| J.P. Morgan Securities, PLC              | 7,597,896.00     | 59,439.83       | 0.008     |
| Kepler Capital Markets                   | 5,456,038.00     | 56,254.44       | 0.010     |
| Parel                                    | 2,869,361.00     | 52,675.27       | 0.018     |
| Macquarie Securities Australia, LTD      | 31,145,964.00    | 50,719.73       | 0.002     |
| Credit Suisse Securities (USA), LLC      | 21,255,644.00    | 48,470.67       | 0.002     |
| Jefferies, LLC                           | 4,676,983.00     | 48,155.61       | 0.010     |
| North South Capital, LLC                 | 6,363,028.00     | 47,652.76       | 0.007     |
| Instinet Pacific Limited                 | 80,447,640.00    | 45,079.49       | 0.001     |
| Joh, Berenberg, Gossler and Co., KG      | 3,595,645.00     | 45,016.72       | 0.013     |
| UBS AG                                   | 821,831.00       | 42,722.08       | 0.052     |
| UBS Securities Asia Limited              | 33,280,769.00    | 40,375.01       | 0.001     |
| UBS Warburg Securities, LTD Taiwan       | 44,503,503.00    | 38,640.47       | 0.001     |
| Jefferies International Ltd              | 9,928,582.00     | 35,524.64       | 0.004     |
| Barclays Capital                         | 22,174,464.00    | 34,544.39       | 0.002     |
| Exane, SA                                | 5,340,902.00     | 33,341.91       | 0.006     |
| Mischler Financial Group                 | 984,448.00       | 31,991.09       | 0.032     |
| UBS AG Stamford Branch                   | 51,102,479.00    | 31,945.31       | 0.001     |
| Credit Lyonnais Securities (Asia) Taiwan | 8,352,940.00     | 30,434.09       | 0.004     |
| Goodbody Stockbrokers                    | 184,621.00       | 30,219.58       | 0.164     |
| J.P. Morgan Securities (Asia Pacific)    | 15,376,701.00    | 28,621.90       | 0.002     |
| Other Brokers                            | 561,331,532.12   | 970,499.62      | 0.002     |
| TOTAL                                    | 1,154,894,553.12 | \$ 2,860,186.39 | \$ 0.002  |

#### **SCHEDULE OF INVESTMENT FEES**

|                                  | 2021<br>Fees  | 2021<br>Assets under<br>management<br>at year end<br>(in thousands)* | Basis<br>Points | 2020<br>Fees  | 2020<br>Assets under<br>management<br>at year end<br>(in thousands)* | Basis<br>Points |
|----------------------------------|---------------|--|-----------------|---------------|--|-----------------|
| Investment manager fees          |               |  |                 |               |  |                 |
| Fixed income managers            | \$ 12,465,518 | \$12,265,210   | 10              | \$ 12,461,084 | \$ 11,295,514  | 11              |
| Stock managers**                 | 34,860,939    | 17,199,536   | 20              | 29,274,744    | 16,707,834   | 18              |
| International managers           | 48,504,265    | 18,995,895   | 26              | 38,543,597    | 15,903,675   | 24              |
| Real estate managers             | 40,087,005    | 4,166,727  | 96              | 36,572,967    | 3,287,202  | 111             |
| Alternative investment managers  | 47,806,707    | 4,768,497  | 100             | 40,101,561    | 3,098,597  | 129             |
| Total                            | 183,724,434   | \$57,395,865   |                 | \$156,953,953 | \$ 50,292,822  |                 |
| Other investment fees            |               |  |                 |               |  |                 |
| Master trustee fees              | \$ 280,000    |  |                 | \$ 280,000    |  |                 |
| Investment consulting fees       | 795,000       |  |                 | 854,676       |  |                 |
| Total investment fees            |               |  | 158,088,629     |               |  |                 |
| Non-fee investment expenses      | 1,944,858     |  |                 | 1,097,088     |  |                 |
| Total direct investment expenses | \$186,744,292 |  |                 | \$159,185,717 |  |                 |

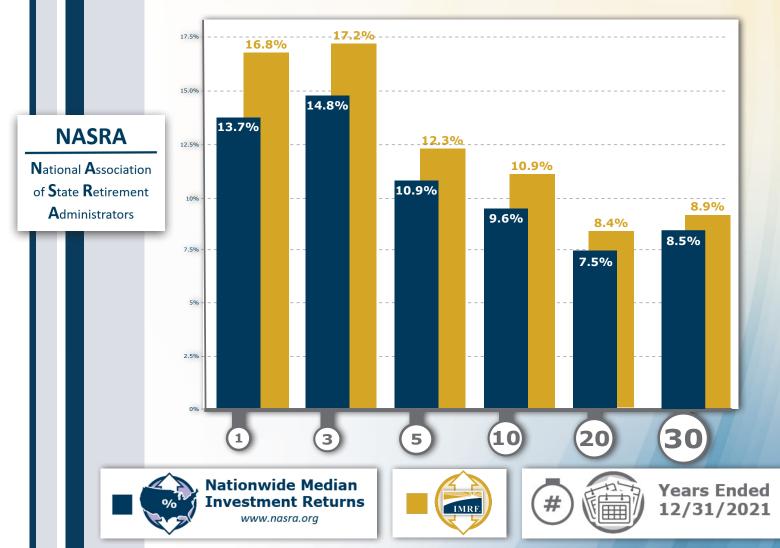
| Securities lending fees                |                 |                |
|--|-----------------|----------------|
| (Borrower rebates) and management fees | \$<br>(787,892) | \$ (2,950,332) |

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

<sup>\*\*</sup> Includes \$799,185 and \$791,808 for 2021 and 2020, respectively in expenses related to IMRF's Equity Internal Management group.

# IMPRISOR FACTOR INDUSTRY-LEADING INVESTMENT MANAGEMENT

Investment returns of NASRA public pensions compared to IMRF over periods ending December 31, 2021



IMRF's best-in-class investment program has helped financially sustain the organization for the last 80 years. IMRF's in-house Investment department partners with a diverse group of portfolio managers, brokers, and consultants to generate returns that consistently exceed industry benchmarks. In 2021, for example, IMRF earned 16.8%, which exceeded the nationwide median public pension return of 13.7%. Due to this Sustainable Success Factor, IMRF investment returns have historically funded 68% of every pension paid.

See page 68 and 69 for the complete list of IMRF's investment consultants.

## **ACTUARIAL**

- 83. Actuary's Certification Letter
- **86.** Summary of Actuarial Assumptions
- **87.** Funded Status and Funding Progress
- **88.** Schedule of Funding Progress
- 88. Schedule of Employer Contributions
- 89. Solvency Test
- 89. Participating Member Statistics
- 90. Schedules 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





800.521.0498 | P: 248.799.9000 | www.grsconsulting.com

March 18, 2022

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 2023 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, 2021, and issued on March 11, 2022. 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 Annual Comprehensive 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 Annual Comprehensive Financial Report Schedule.

Board of Trustees Illinois Municipal Retirement Fund March 18, 2022 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, 2021 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 98.6% funded based upon the smoothed value of assets and 113.3% funded based upon market value. Each participating employer, however, has a separate funding percent, some of which will be above the aggregate result, and others of which will be below it. Based upon the results of the December 31, 2021 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.



## IMRE. ACTUARIAL

Board of Trustees Illinois Municipal Retirement Fund March 18, 2022 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 Annual Comprehensive Financial Report contains some, but not all, of the information in the valuation reports.

This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

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,
Gabriel, Roeder, Smith & Company

Mark Buis, FSA, EA, FCA, MAAA

Francois Pieterse, ASA, FCA, MAAA

Laura Frankowiak, ASA, FCA, MAAA

MB/FP/LF:sc Enclosure



## Illinois Municipal Retirement Fund Brief Summary of Actuarial Assumptions Used in 2021 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   | Disa        | ability | 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%  | 0.06%       | 0.01%       | 0.01%   | 3.73%                  |
| 50  | 0.21%  | 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       |           |       |          | Retiremen        | t (Tier 1) |              |            |
|     | (8+ Yrs. S | erv.)    | SLEP      | Reduc | ed Early | Normal Unreduced |            | SLEP 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 2021) |                     |  |         |         |  |  |  |  |
|---|---------------------|--|---------|---------|--|--|--|--|
|   | Annuitant Mortality |  |         |         |  |  |  |  |
|   | Healthy A           | Healthy Annuitants Disabled Annuitants |         |         |  |  |  |  |
| Ages                                    | Male                | Female                                 | Male    | Female  |  |  |  |  |
| 40                                      | 0.1322%             | 0.0580%                                | 0.8381% | 0.7394% |  |  |  |  |
| 50                                      | 0.7186%             | 0.4151%                                | 1.5091% | 1.3960% |  |  |  |  |
| 60                                      | 1.1955%             | 0.5924%                                | 2.6066% | 2.0704% |  |  |  |  |
| 70                                      | 2.0689%             | 1.1160%                                | 3.6500% | 2.5585% |  |  |  |  |
| 80                                      | 5.7161%             | 3.5905%                                | 6.7081% | 5.6153% |  |  |  |  |



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

As of December 31, 2021, the most recent actuarial valuation date, the plan on an aggregate basis was 98.6% funded on an actuarial basis. The actuarial accrued liability for benefits was \$50.9 billion, and the actuarial value of assets was \$50.2 billion, resulting in an unfunded actuarial accrued liability (UAAL) of \$736 million. The covered payroll (annual payroll of active employees covered by the plan) was \$7.8 billion, and the ratio of the UAAL to the covered payroll was 9.4%.

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, 2021   |
|------------------------|---|
| 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, 20 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   |
| -                           | For non-disabled retirees, the Pub-2010, Amount-Weighted, below-med Retiree, Male (adjusted 106%) and Female (adjusted 105%) tables, and Female (adjusted 10 |

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 (adjusted 100%) and Female (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.

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

|   | Aggregate                     | Actuarial Liabilities (A                       | AL)   | Unfunded Actuarial Liabilities (UAL) |                       |  |  |
|---|-------------------------------|--|-------|--------------------------------------|-----------------------|--|--|
| Actuarial<br>Valuation<br>Date<br>December 31 | Total AAL<br>Entry Age<br>(a) | Actuarial Assets as a percent (b) of AAL (b/a) |       | Total UAL<br>(a-b)                   | Member Payroll<br>(c) | UAL as a<br>percent of<br>Member<br>Payroll<br>(a-b)/c |  |
| 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   |  |
| 2021  | 50,927,551,000                | 50,191,547,801                                 | 98.6  | 736,003,199                          | 7,811,067,072         | 9.4  |  |

<sup>\*</sup> After assumption change

This data was provided by the Actuary.

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

| Year Ended<br>December 31 | Normal<br>Contributions | Amortization<br>of Unfunded<br>Actuarial<br>Liability | Death &<br>Disability<br>Benefit<br>Contributions | Supplemental<br>Retirement<br>Benefit<br>Contributions | Total<br>Contributions | Percentage of<br>Actuarial<br>Required<br>Contribution<br>Contributed |
|---------------------------|-------------------------|---|---|--|------------------------|---|
| 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   |
| 2021                      | 457,124,851             | 443,791,293   | 19,361,764  | 49,142,209   | 969,420,117            | 100   |



#### **TABLE III**

Solvency Test (Last ten years)

|                  | Aggreg                                     | ate Actuarial Liabilitie | s (AAL)   |                   |        | Portion of<br>arial Liabili<br>ered by Ass |       |
|------------------|--|--------------------------|---|-------------------|--------|--|-------|
| Calendar<br>Year | Active Member Annuitants Contributions (2) |                          | Active Members<br>(Employer Financed<br>Portion)<br>(3) | Actuarial Assets  | (1)    | (2)  | (3)   |
| 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  |
| 2021             | 7,725,384,410                              | 29,173,126,705           | 14,029,039,895  | 50,191,547,801    | 100.0  | 100.0                                      | 94.8  |

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

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

| Calendar<br>Year | Total Salaries   | Percent<br>Increase<br>(Decrease) in<br>Total Salaries | Average<br>Annual Salary | Percent<br>Increase in<br>Average Salary | Number of<br>Participating<br>Members | Average<br>Attained<br>Age | Average<br>Years of<br>Service |
|------------------|------------------|--|--------------------------|--|---------------------------------------|----------------------------|--------------------------------|
| 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                           |
| 2021             | 7,811,067,072    | 3.2  | 45,315                   | 2.2                                      | 172,731                               | 47.5                       | 10.0                           |

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

**TABLE V**Schedules of Adds and Removals from Rolls (Last ten years)

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

|                  | Ado    | led to Rolls       | Remov  | ed from Rolls      | End     | of Year Rolls    |                              |  |
|------------------|--------|--------------------|--------|--------------------|---------|------------------|------------------------------|--|
| Calendar<br>Year | Number | Annual<br>Benefits | Number | Annual<br>Benefits | Number  | Annual Benefits  | Average<br>Annual<br>Benefit | Percent<br>Change in<br>Average<br>Benefit |
| 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  |
| 2021             | 10,170 | 198,690,457        | 5,365  | 26,738,938         | 147,134 | 2,574,931,964    | 17,501                       | 3.7  |

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

|                  | Add    | ed to Rolls        | Remov  | ved from Rolls End of Year Rolls |        | f Year Rolls       |                              |  |
|------------------|--------|--------------------|--------|----------------------------------|--------|--------------------|------------------------------|--|
| Calendar<br>Year | Number | Annual<br>Benefits | Number | Annual<br>Benefits               | Number | Annual<br>Benefits | Average<br>Annual<br>Benefit | Percent<br>Change in<br>Average<br>Benefit |
| 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)                                      |
| 2021             | 1,553  | 24,187,499         | 1,594  | 24,989,318                       | 653    | 7,568,772          | 11,591                       | (3.9)                                      |



**TABLE VI** *Average Employer Contribution Rates* 

| Calendar<br>Year | Normal Cost       | Amortization<br>of Unfunded<br>Liability | Early<br>Retirement<br>Incentive<br>(ERI) Liability | SLEP<br>Enhancement<br>Liability | Disability and<br>Death | Supplemental<br>Retirement<br>Benefit | Total  |  |  |
|------------------|-------------------|--|---|----------------------------------|-------------------------|---------------------------------------|--------|--|--|
| Regular men      | Regular members   |  |   |                                  |                         |                                       |        |  |  |
| 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   |  |  |
| 2023             | 5.09              | 0.43                                     | 0.14  | n/a                              | 0.27                    | 0.62                                  | 6.55   |  |  |
| Sheriff's Law    | Enforcement I     | Personnel (SLE                           | P) members  |                                  |                         |                                       |        |  |  |
| 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  |  |  |
| 2023             | 9.87              | 3.50                                     | 0.06  | 2.05                             | 0.28                    | 0.62                                  | 16.38  |  |  |
| Elected Cour     | nty Official (ECC | ) members                                |   |                                  |                         |                                       |        |  |  |
| 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  |  |  |
| 2023             | 13.14             | 24.05                                    | 0.00  | n/a                              | 0.32                    | 0.62                                  | 38.13  |  |  |

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

|      | R      | egular IMR | F     | Sheriff's Law Enforcement Personnel Elected C |          |       | Elected Co | ounty Official |          |       |       |
|------|--------|------------|-------|---|----------|-------|------------|----------------|----------|-------|-------|
| Year | Normal | Survivor   | Total | Normal  | Survivor | SLEP  | Total      | Normal         | Survivor | ECO   | Total |
| 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  |
| 2021 | 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**

|   | Decem             | ber 31            |
|---|-------------------|-------------------|
|   | 2021              | 2020              |
| Sources of Funds                                |                   |                   |
| Actuarial value of assets                       | \$ 50,191,547,801 | \$ 46,017,438,373 |
| Actuarial present value of future contributions |                   |                   |
| Member  | 2,738,327,976     | 2,645,881,765     |
| Employer Normal Costs                           | 3,022,571,092     | 2,996,072,204     |
| Under Funded Actuarial Accrued Liability        | 736,003,199       | 2,905,510,366     |
| Total Sources                                   | \$ 56,688,450,068 | \$ 54,564,902,708 |
| Uses of Funds                                   |                   |                   |
| Retired members and beneficiaries               | \$ 29,173,126,705 | \$ 27,251,813,875 |
| Inactive members                                | 4,380,869,719     | 4,147,138,786     |
| Active members                                  | 22,718,955,645    | 22,813,825,291    |
| Voluntary additional members                    | 397,621,378       | 333,160,284       |
| Death and disability benefits                   | 17,876,621        | 18,964,472        |
| Total Uses                                      | \$ 56,688,450,068 | \$ 54,564,902,708 |

#### **ANALYSIS OF UNDERFUNDED LIABILITY**

|  | December 31 |                 |    |                 |  |  |  |
|--|-------------|-----------------|----|-----------------|--|--|--|
|  | 2           | 021             | 2  | 2020            |  |  |  |
| Underfunded liability beginning of year  | \$          | 2,905,510,366   | \$ | 4,421,715,330   |  |  |  |
| Assumed net (payments) during year       |             | (217,755,192)   |    | (327,270,697)   |  |  |  |
| Assumed interest                         |             | 202,847,945     |    | 308,849,181     |  |  |  |
| Expected underfunded liability           | \$          | 2,890,603,119   | \$ | 4,403,293,814   |  |  |  |
| (Decrease) due to change in assumptions  | \$          | -               | \$ | (357,008,491)   |  |  |  |
| (Decrease) due to investment performance |             | (2,174,486,990) |    | (1,177,273,755) |  |  |  |
| Decrease due to other sources            |             | 19,887,070      |    | 36,498,798      |  |  |  |
| Under funded liability end of year       | \$          | 736,003,199     | \$ | 2,905,510,366   |  |  |  |



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

|  | 2021       | 2020       |
|--|------------|------------|
| Type of Risk Area                          |            |            |
| Risks Related to Assumptions (in millions) |            |            |
| Economic Risk Areas                        |            |            |
| Investment Return/(Loss)                   | \$ 2,174.5 | \$ 1,177.3 |
| Pay Increases                              | (76.2)     | (27.0)     |
| Demographic Risk Areas                     |            |            |
| Service Retirements                        | (54.0)     | (25.6)     |
| Early Retirements                          | (17.2)     | (6.6)      |
| Vested Deferred Retirements                | (8.4)      | (23.7)     |
| Death and Survivor Benefits                | 1.2        | (2.3)      |
| Disability Benefits                        | 8.9        | 10.6       |
| Terminated with Refund                     | 49.6       | 15.6       |
| Changes due to Experience Study (1)        | 0.0        | 357.0      |
| Risks Not Related to Assumptions (2)       | 76.2       | 22.5       |
| Total Gain (Loss) During Year              | \$ 2,154.6 | \$ 1,497.8 |

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

- (1) Reflects the impact of the triennial experience study. The most significant adjustment to the actuarial assumptions was a change in the mortality tables.
- (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 3,032 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 68% 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.



#### **REFUNDS**

Non-vested members who stop working for an IMRF employer can receive a lump sum refund of their IMRF member contributions. Vested members can receive a lump sum refund of their IMRF 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 2022 will be \$119,892.40, and in 2021 it was \$116,740.42 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

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.

#### SUPPLEMENTAL RETIREMENT BENEFITS

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

#### **DISABILITY BENEFITS**

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

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

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

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

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

ECO members are eligible for ECO disability benefits if they:

Have at least 12 consecutive months of service credit since being enrolled in IMRF,

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

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

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

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

#### **DEATH BENEFITS**

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

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

#### SURVIVING SPOUSE PENSION

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

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

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

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

## THER 2 REDUCES COSTS

## IMRF's Tier 1 and Tier 2 Membership Comparison Since 2011



The introduction of the Tier 2 benefits structure in 2011 reduced costs for IMRF moving forward. The cost of providing a Tier 2 pension is about 40% less than its Tier 1 counterpart. Each day, new Tier 2 members join the system, and more Tier 1 members retire. Since 2011, the number of active Tier 2 Regular Plan members has grown to more than 80,000 strong. In 2021, for the first time, the number of active Tier 2 members exceeded the number of active Tier 1 members. The cost advantages embedded into the Tier 2 benefits program is a Sustainable Success Factor for IMRF.

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#### **TABLE VIII**

Changes in Fiduciary Net Position (Last ten years)

|                  | Additions  |                |                                      |                         |         |                                     |  |  |  |  |
|------------------|--|----------------|--------------------------------------|-------------------------|---------|-------------------------------------|--|--|--|--|
|                  |  | Employer (     | Contributions                        |                         |         |                                     |  |  |  |  |
| Calendar<br>Year | Investment<br>Earnings<br>Net of Direct<br>Investment<br>Expense | Dollars        | Percent of Annual<br>Covered Payroll | Member<br>Contributions | Other   | Total<br>Additions                  |  |  |  |  |
| 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                       |  |  |  |  |
| 2021             | 8,449,144,804  | 969,420,117    | 12.41%                               | 471,392,017             | 14,750  | 9,889,971,688                       |  |  |  |  |
|                  |  | Deductions     |                                      |                         |         |                                     |  |  |  |  |
| Calendar<br>Year | Benefits   | Refunds        | Administrative<br>Expenses           | Total Deductions        |         | Change in Fiduciary<br>Net Position |  |  |  |  |
| 2012             | \$ 1,389,815,471   | \$ 34,142,193  | \$ 24,508,053                        | \$ 1,448,465,717        |         | \$ 3,159,266,216                    |  |  |  |  |
| 2013             | 1,503,374,148  | 36,944,214     | 25,463,299                           | 1,565,781,661           |         | 5,287,250,276                       |  |  |  |  |
| 2014             | 1,626,821,250  | 39,191,090     | 26,431,652                           | 1,692,443,992           |         | 1,583,468,306                       |  |  |  |  |
| 2015             | 1,758,184,358  | 36,748,509     | 28,707,981                           | 1,823,640,848           |         | (353,967,434)                       |  |  |  |  |
| 2016             | 1,902,139,898  | 37,690,098     | 38,702,237                           | 1,978,532,233           |         | 2,000,667,217                       |  |  |  |  |
| 2017             | 2,043,613,657  | 42,552,060     | 31,038,134                           | 2,117,203,851           |         | 4,898,260,866                       |  |  |  |  |
| 2018             | 2,194,961,403  | 48,028,752     | 32,213,168                           | 2,275,203,323           |         | (2,660,936,091)                     |  |  |  |  |
| 2019             | 2,347,237,088  | 51,372,047     | 38,373,543                           | 2,436,982,678           |         | 6,298,905,836                       |  |  |  |  |
| 2020             | 2,494,317,158  | 52,178,126     | 31,776,955                           | 2,578,272,239           |         | 5,521,946,208                       |  |  |  |  |
| 2021             | 2,673,448,177  | 60,073,886     | 28,318,297                           | 2,761,840,360           |         | 7,128,131,328                       |  |  |  |  |

**TABLE IX**Benefit Expense by Type (Last ten years)

|                  | Death         |              |              |              |  |  |  |  |  |
|------------------|---------------|--------------|--------------|--------------|--|--|--|--|--|
| Calendar<br>Year | Supplemental  | Refund       | Burial       | Residual     |  |  |  |  |  |
| 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    |  |  |  |  |  |
| 2021             | 10,578,556    | 12,428,656   | 12,140,537   | 4,139,509    |  |  |  |  |  |

| Disability   |              |  |  |  |  |  |  |
|--------------|--------------|--|--|--|--|--|--|
| Permanent    | Temporary    |  |  |  |  |  |  |
| \$ 3,878,005 | \$ 7,012,081 |  |  |  |  |  |  |
| 3,949,374    | 7,265,126    |  |  |  |  |  |  |
| 3,688,052    | 7,214,455    |  |  |  |  |  |  |
| 3,526,820    | 6,267,477    |  |  |  |  |  |  |
| 3,480,432    | 6,227,065    |  |  |  |  |  |  |
| 3,058,374    | 6,393,159    |  |  |  |  |  |  |
| 3,065,933    | 6,374,393    |  |  |  |  |  |  |
| 2,712,027    | 6,167,549    |  |  |  |  |  |  |
| 2,769,573    | 5,613,563    |  |  |  |  |  |  |
| 2,637,053    | 6,697,669    |  |  |  |  |  |  |

|                  |                  | ties                | Refu         | ınds          |               |              |                  |
|------------------|------------------|---------------------|--------------|---------------|---------------|--------------|------------------|
| Calendar<br>Year | Retirement       | Surviving<br>Spouse | Beneficiary  | Supplemental  | Separation    | Other        | Total            |
| 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    |
| 2021             | 2,427,956,084    | 142,577,422         | 5,425,454    | 48,867,237    | 33,700,370    | 26,373,516   | 2,733,522,063    |



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

| Year | Employer<br>Contributions | Member<br>Contributions | Total<br>Contributions | Total<br>Benefit Payments | Net Cash Flow    |
|------|---------------------------|-------------------------|------------------------|---------------------------|------------------|
| 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)  |
| 2021 | 969,420,117               | 471,392,017             | 1,440,812,134          | 2,733,522,063             | (1,292,709,929)  |

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

| Calendar<br>Year | Annuity | Disability | Death | Refund | Total  |
|------------------|---------|------------|-------|--------|--------|
| 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      | 3,795 | 11,111 | 24,828 |
| 2019             | 8,037   | 1,770      | 3,793 | 10,954 | 24,554 |
| 2020             | 8,143   | 1,443      | 4,067 | 10,068 | 23,721 |
| 2021             | 8,565   | 1,553      | 4,423 | 7,473  | 22,014 |

**TABLE XII**Number of Employees (Last ten years)

| Calendar Year End             | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|-------------------------------|------|------|------|------|------|------|------|------|------|------|
| Administration (2)            | 4    | 4    | 4    | 4    | 5    | 6    | 6    | 2    | 2    | 2    |
| Benefits (3)                  | 28   | 28   | 28   | 31   | 31   | 35   | 33   | 19   | 20   | 20   |
| Communications                | 7    | 6    | 7    | 9    | 9    | 8    | 8    | 9    | 9    | 9    |
| Customer Service (2)          | -    | -    | -    | -    | -    | -    | -    | 1    | 1    | 1    |
| Disability (3)                | -    | -    | -    | -    | -    | -    | -    | 15   | 13   | 13   |
| Field Services (4)            | -    | -    | -    | -    | -    | -    | -    | 12   | 11   | 8    |
| Finance                       | 28   | 29   | 27   | 27   | 20   | 25   | 25   | 24   | 27   | 25   |
| Human Resources               | 4    | 3    | 4    | 4    | 4    | 4    | 4    | 4    | 5    | 5    |
| Information Services          | 34   | 35   | 33   | 34   | 32   | 40   | 43   | 41   | 43   | 44   |
| Internal Audit (1)            | 4    | 7    | 7    | 7    | 8    | 8    | 8    | 8    | 8    | 4    |
| Investments                   | 9    | 10   | 13   | 13   | 14   | 14   | 14   | 17   | 17   | 15   |
| Legal (1, 5)                  | 4    | 4    | 5    | 5    | 5    | 5    | 6    | 8    | 8    | 13   |
| Member Services (4)           | 28   | 30   | 33   | 35   | 37   | 38   | 40   | 28   | 29   | 30   |
| Office Services (5)           | 22   | 21   | 19   | 19   | 19   | 19   | 19   | 18   | 18   | 18   |
| Organizational Excellence (2) | -    | -    | -    | -    | -    | -    | -    | 3    | 3    | 3    |
| Program Management (6)        | 4    | 5    | 5    | 6    | 6    | -    | -    | -    | -    | -    |
| Total                         | 176  | 182  | 185  | 194  | 190  | 202  | 206  | 209  | 214  | 210  |

<sup>(1)</sup> The Compliance unit moved from Internal Audit to Legal in 2021

#### **TABLE XIII**

Number of Actively Participating Employers (Last ten years)

| Calendar Year<br>End | Cities | Villages | Counties | School<br>Districts | Townships | Other | Total |
|----------------------|--------|----------|----------|---------------------|-----------|-------|-------|
| 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 |
| 2021                 | 261    | 423      | 101      | 850                 | 484       | 913   | 3,032 |

<sup>(2)</sup> The Customer Service and Organizational Excellence departments separated from Administration in 2019

<sup>(3)</sup> The Disability department separated from Benefits in 2019

<sup>(4)</sup> The Field Services department separated from Member Services in 2019

<sup>(5)</sup> The Procurement unit moved from Office Services to Legal in 2019

<sup>(6)</sup> The Program Management department merged with Information Systems in 2017



#### **TABLE XIV**

Principal Participating Employers (Current year and ten years ago)

|                                   |                   | 2021  |   |                   | 2012 |  |
|-----------------------------------|-------------------|-------|---|-------------------|------|--|
| Employer                          | Active<br>Members | Rank  | Percentage<br>of Total<br>Active<br>Members | Active<br>Members | Rank | Percentage of<br>Total Active<br>Members |
| DuPage County                     | 3,082             | 1     | 1.79%                                       | 2,995             | 1    | 1.71%                                    |
| Will County                       | 2,710             | 2     | 1.57  | 2,294             | 3    | 1.31                                     |
| Lake County                       | 2,458             | 3     | 1.43  | 2,425             | 2    | 1.39                                     |
| Union School District 46          | 2,261             | 4     | 1.31  | 1,797             | 4    | 1.03                                     |
| Rockford School District 205      | 1,443             | 5     | 0.84  | 1,431             | 6    | 0.82                                     |
| Winnebago County                  | 1,412             | 6     | 0.82  | 1,474             | 5    | 0.84                                     |
| Kane County                       | 1,408             | 7     | 0.82  | 1,115             | 9    | 0.64                                     |
| Township High School District 211 | 1,300             | 8     | 0.75  | 1,243             | 8    | 0.71                                     |
| McHenry County                    | 1,218             | 9     | 0.71  | 1,286             | 7    | 0.74                                     |
| Plainfield School District 150    | 1,046             | 10    | 0.61  | N/A*              | N/A* | N/A*                                     |
| Valley View CU SD 365U            | N/A**             | N/A** | N/A**                                       | 1,097             | 10   | 0.63                                     |

<sup>\*</sup>In 2011, this entity did not rank in the Top Ten.

**TABLE XV**Number of Actively Participating Members (Last ten years)

| Calendar Year End | Male Participants | Female Participants | Total   |
|-------------------|-------------------|---------------------|---------|
| 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 |
| 2021              | 64,037            | 108,273             | 172,310 |

<sup>\*\*</sup> In 2020, this entity did not rank in the Top Ten.

**TABLE XVI**Participating Members' Length of Service (Last ten years)

| Calendar<br>Year | Total Active<br>Members | Under 1 Year | 1 to 7 Years | 8 to 14 Years | 15 Years<br>and Over | Percent<br>Vested |
|------------------|-------------------------|--------------|--------------|---------------|----------------------|-------------------|
| 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              |
| 2021             | 170,310                 | 22,720       | 70,446       | 33,437        | 45,707               | 46.5              |

**TABLE XVII**Active Members by Age

|             |        | All Plans |         | Sheriff's | s Law Enfor<br>Personnel | cement | Electe | ed County O | fficial |
|-------------|--------|-----------|---------|-----------|--------------------------|--------|--------|-------------|---------|
| Age         | Male   | Female    | Total   | Male      | Female                   | Total  | Male   | Female      | Total   |
| Under 20    | 282    | 307       | 589     | 2         | 1                        | 3      | -      | -           | -       |
| 20 to 29    | 8,422  | 11,074    | 19,496  | 572       | 85                       | 657    | -      | -           | -       |
| 30 to 39    | 13,162 | 18,608    | 31,770  | 1,093     | 153                      | 1,246  | -      | -           | -       |
| 40 to 49    | 14,014 | 25,276    | 39,290  | 1,143     | 200                      | 1,343  | 7      | 1           | 8       |
| 50 to 54    | 8,083  | 16,048    | 24,131  | 428       | 53                       | 481    | 6      | 5           | 11      |
| 55 to 59    | 8,294  | 16,712    | 25,006  | 161       | 31                       | 192    | 14     | 9           | 23      |
| 60 to 69    | 9,976  | 18,302    | 28,278  | 107       | 16                       | 123    | 16     | 12          | 28      |
| 70 and Over | 1,804  | 1,946     | 3,750   | 8         | -                        | 8      | 3      | 2           | 5       |
| Total       | 64,037 | 108,273   | 172,310 | 3,514     | 539                      | 4,053  | 46     | 29          | 75      |



#### **TABLE XVIII**

Annuitants by Age

|              | Retirees |        |         | Sui   | viving Spou | Beneficiaries |      |        |       |
|--------------|----------|--------|---------|-------|-------------|---------------|------|--------|-------|
| Age          | Male     | Female | Total   | Male  | Female      | Total         | Male | Female | Total |
| Under 55     | 346      | 63     | 409     | 17    | 97          | 114           | 121  | 173    | 294   |
| 55 to 59     | 3,121    | 5,249  | 8,370   | 45    | 220         | 265           | 20   | 89     | 109   |
| 60 to 64     | 7,030    | 14,025 | 21,055  | 150   | 594         | 744           | 37   | 86     | 123   |
| 65 to 69     | 10,223   | 21,304 | 31,527  | 388   | 977         | 1,365         | 35   | 77     | 112   |
| 70 to 74     | 9,256    | 19,687 | 28,943  | 680   | 1,414       | 2,094         | 25   | 63     | 88    |
| 75 to 79     | 5,887    | 13,223 | 19,110  | 830   | 1,725       | 2,555         | 17   | 55     | 72    |
| 80 to 84     | 3,515    | 8,261  | 11,776  | 936   | 1,823       | 2,759         | 8    | 33     | 41    |
| 85 to 89     | 1,852    | 4,821  | 6,673   | 803   | 1,581       | 2,384         | 6    | 14     | 20    |
| 90 to 94     | 724      | 2,396  | 3,120   | 477   | 999         | 1,476         | 1    | 10     | 11    |
| 95 to 99     | 160      | 719    | 879     | 124   | 328         | 452           | _    | 2      | 2     |
| 100 and over | 11       | 99     | 110     | 14    | 68          | 82            | -    | -      | -     |
| Total        | 42,125   | 89,847 | 131,972 | 4,464 | 9,826       | 14,290        | 270  | 602    | 872   |

#### **TABLE XIX**

Average Initial Benefit Payment Amounts (Last ten years)

|               | Single Sum         | Payments                  | Recurring Payments    |                       |  |
|---------------|--------------------|---------------------------|-----------------------|-----------------------|--|
| Calendar Year | Separation Refunds | Lump Sum<br>Death Benefit | Annual Disability (1) | Annual Retirement (2) |  |
| 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                |  |
| 2021          | 4,538              | 46,606                    | 22,999                | 21,376                |  |

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

<sup>(2)</sup> Includes voluntary additional benefits.

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

|                     | Years of Credited Service |          |          |          |          |          |          |          |
|---------------------|---------------------------|----------|----------|----------|----------|----------|----------|----------|
|                     | 8-9                       | 10-14    | 15-19    | 20-24    | 25-29    | 30-34    | 35+      | Total    |
| 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                | ,                         |          | r        |          |          |          |          |          |
| 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    |
| 2021                |                           |          | :        |          |          |          |          |          |
| Avg Monthly Annuity | \$ 405                    | \$ 642   | \$ 1,058 | \$ 1,628 | \$ 2,336 | \$ 3,516 | \$ 4,636 | \$ 1,859 |
| Avg Monthly FRE     | \$ 2,907                  | \$ 3,196 | \$ 3,636 | \$ 4,202 | \$ 4,853 | \$ 6,066 | \$ 6,575 | \$ 4,357 |
| Number of Retirees  | 262                       | 1,260    | 1,316    | 1,423    | 883      | 714      | 610      | 6,468    |

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

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



#### **TABLE XXI**

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

|                     | Years of Credited Service |          |          |          |          |          |  |
|---------------------|---------------------------|----------|----------|----------|----------|----------|--|
|                     | 15-19                     | 20-24    | 25-29    | 30-34    | 35+      | Total    |  |
| 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      |  |
| 2021                | ,                         |          |          |          |          |          |  |
| Avg Monthly Annuity | \$ -                      | \$ 4,160 | \$ 5,789 | \$ 6,998 | \$ 7,281 | \$ 5,267 |  |
| Avg Monthly FRE     | \$ -                      | \$7,739  | \$ 8,886 | \$ 8,905 | \$ 9,101 | \$ 8,380 |  |
| Number of Retirees  | -                         | 124      | 106      | 38       | 8        | 276      |  |

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

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

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

|                     | Years of Credited Service |          |          |          |           |          |          |              |
|---------------------|---------------------------|----------|----------|----------|-----------|----------|----------|--------------|
|                     | 8-9                       | 10-14    | 15-19    | 20-24    | 25-29     | 30-34    | 35+      | Total        |
| 2012                |                           |          |          |          |           |          |          |              |
| Avg Monthly Annuity | \$ 687                    | \$ 845   | \$ 762   | \$ 4,046 | \$ -      | \$ 4,598 | \$ -     | \$ 1,990     |
| Avg Monthly FRE     | \$ 2,312                  | \$ 1,934 | \$ 1,186 | \$ 5,058 | \$ -      | \$ 5,748 | \$ -     | \$ 2,967     |
| Number of Retirees  | 2                         | 9        | 5        | 8        | -         | 1        | _        | 25           |
| 2013                |                           | •        |          |          |           | :        |          | •            |
| Avg Monthly Annuity | \$ 992                    | \$ 1,070 | \$ -     | \$ 3,590 | \$ -      | \$ -     | \$ -     | \$ 2,304     |
| Avg Monthly FRE     | \$ 3,958                  | \$ 2,144 | \$ -     | \$ 4,487 | \$ -      | \$ -     | \$ -     | \$ 3,920     |
| Number of Retirees  | 4                         | 2        | -        | 6        | -         | -        | -        | 12           |
| 2014                |                           | ·        |          |          |           | •        | ·        | ·            |
| Avg Monthly Annuity | \$ -                      | \$ 840   | \$ 553   | \$ 2,204 | \$ 891    | \$ 330   | \$ 3,877 | \$ 647       |
| Avg Monthly FRE     | \$ -                      | \$ 1,940 | \$ 779   | \$ 2,756 | \$ 1,136  | \$ 413   | \$ 4,846 | \$ 844       |
| Number of Retirees  | -                         | 3        | 7        | 6        | 5         | 1        | 2        | 24           |
| 2015                |                           |          |          |          |           |          |          |              |
| Avg Monthly Annuity | \$ -                      | \$ 1,204 | \$ -     | \$ -     | \$ -      | \$ -     | \$ -     | \$ 1,204     |
| Avg Monthly FRE     | \$ -                      | \$ 2,988 | \$ -     | \$ -     | \$ -      | \$ -     | \$ -     | \$ 2,988     |
| Number of Retirees  | _                         | 2        | -        | -        | -         | -        | -        | 2            |
| 2016                |                           |          |          |          |           |          |          |              |
| Avg Monthly Annuity | \$ -                      | \$ 990   | \$ 3,088 | \$ 4,568 | \$ 4,725  | \$ 966   | \$ -     | \$ 3,126     |
| Avg Monthly FRE     | \$ -                      | \$ 2,170 | \$ 5,537 | \$ 5,711 | \$ 5,907  | \$ 1,207 | \$ -     | \$ 4,378     |
| Number of Retirees  | -                         | 6        | 2        | 6        | 4         | 1        | -        | 19           |
| 2017                |                           |          |          |          | ,         |          |          | *            |
| Avg Monthly Annuity | \$ 481                    | \$ 405   | \$ 2,323 | \$ 1,104 | \$ -      | \$ -     | \$ -     | \$ 1,432     |
| Avg Monthly FRE     | \$ 1,953                  | \$ 854   | \$ 3,403 | \$ 1,380 | \$ -      | \$ -     | \$ -     | \$ 2,175     |
| Number of Retirees  | 1                         | 3        | 6        | 4        | -         | -        | -        | 14           |
| 2018                |                           |          |          |          |           |          |          | ,            |
| 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                |                           | ;        | ,        |          | ,         | ·        | ;        | 7            |
| Avg Monthly Annuity | \$ 151                    | \$ 192   | \$ -     | \$ 6,368 | \$ 3,672  | \$ -     | \$ -     | \$ 2,824     |
| Avg Monthly FRE     | \$ 606                    | \$ 461   | \$ -     | \$ 7,959 | \$ 5,325  | \$ -     | \$ -     | \$ 3,795     |
| Number of Retirees  | 1                         | 32       | -        | 2        | 1         | -        | -        | 6            |
| 2020                |                           | :        | ,        |          | :         | ;        | :        | <del>:</del> |
| 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            |
| 2021                |                           | ,        | ,        |          | ,         | ,        | ,        | ,            |
| Avg Monthly Annuity | \$ -                      | \$ 5,686 | \$ -     | \$ -     | \$ 10,867 | \$ -     | \$ 5,291 | \$ 6,784     |
| Avg Monthly FRE     | \$ -                      | \$10,746 | \$ -     | \$ -     | \$ 13,584 | \$ -     | \$ 6,614 | \$9,390      |
| Number of Retirees  | -                         | 1        | -        | -        | 1         | -        | 2        | 4            |

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

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



#### **TABLE XXIII**

#### Distribution of Current Annuitants by Pension Amount

|                          | Retirement<br>Number of |         | Surv<br>Numb |         | All Annuities<br>Number of |         |  |
|--------------------------|-------------------------|---------|--------------|---------|----------------------------|---------|--|
| Monthly Pension Amount   | Males                   | Females | Males        | Females | Males                      | Females |  |
| Under \$100              | 827                     | 4,455   | 461          | 501     | 1,288                      | 4,956   |  |
| \$100 to under \$250     | 1,963                   | 10,278  | 1,121        | 1,415   | 3,084                      | 11,693  |  |
| \$250 to under \$500     | 4,086                   | 17,129  | 1,193        | 2,125   | 5,279                      | 19,254  |  |
| \$500 to under \$750     | 3,898                   | 12,853  | 640          | 1,431   | 4,538                      | 14,284  |  |
| \$750 to under \$1,000   | 3,280                   | 9,319   | 349          | 1,077   | 3,629                      | 10,396  |  |
| \$1,000 to under \$2,000 | 9,102                   | 19,471  | 401          | 2,070   | 9,503                      | 21,541  |  |
| \$2,000 to under \$3,000 | 5,762                   | 7,626   | 49           | 621     | 5,811                      | 8,247   |  |
| \$3,000 to under \$4,000 | 4,265                   | 3,105   | 18           | 191     | 4,283                      | 3,296   |  |
| \$4,000 to under \$5,000 | 2,958                   | 1,328   | 3            | 68      | 2,961                      | 1,396   |  |
| \$5,000 to under \$6,000 | 1,911                   | 575     | 1            | 26      | 1,912                      | 601     |  |
| \$6,000 and over         | 2,832                   | 509     | -            | 15      | 2,832                      | 524     |  |
| Total                    | 40,884                  | 86,648  | 4,236        | 9,540   | 45,120                     | 96,188  |  |

2021

Tier 2

**Total** 

Note: Counts do not include disabilities.

#### **TABLE XXIV**

Membership By Tier

| Annuitants/Beneficiaries |         |         |         |
|--------------------------|---------|---------|---------|
| <b>Total Retirees</b>    | 146,940 | 194     | 147,134 |
|                          |         |         |         |
| Active                   |         |         |         |
| Vested                   | 67,201  | 3,258   | 70,459  |
| Non-Vested               | 13,813  | 88,038  | 101,851 |
| Total                    | 81,014  | 91,296  | 172,310 |
| Inactive                 |         |         |         |
| Vested                   | 15,344  | 201     | 15,545  |
| Non-Vested               | 66,663  | 56,183  | 122,846 |
| Total                    | 82,007  | 56,384  | 138,391 |
| Active/Inactive          |         |         |         |
| Vested                   | 82,545  | 3,459   | 86,004  |
| Non-Vested               | 80,476  | 144,221 | 224,697 |
| Total Active/Inactive    | 163,021 | 147,680 | 310,701 |
|                          |         |         |         |
| Total Membership         | 309,961 | 147,874 | 457,835 |

Tier 1

| 142,267 | 62      | 142,329 |
|---------|---------|---------|
|         |         |         |
|         |         |         |
| 73,616  | 304     | 73,920  |
| 14,433  | 82,382  | 96,815  |
| 88,049  | 82,686  | 170,735 |
|         |         |         |
| 14,985  | 26      | 15,011  |
| 67,209  | 47,559  | 114,768 |
| 82,194  | 47,585  | 129,779 |
|         |         |         |
| 88,601  | 330     | 88,931  |
| 81,642  | 129,941 | 211,583 |
| 170,243 | 130,271 | 300,514 |
|         |         |         |

130,333

2020

Tier 1

312,510

Tier 2

Total

442,843

#### 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.



2020-2022

## STRATEGIC PLAN

Le! Result Area

#### Financial Health

To achieve and maintain a funding level that sustains the Plan

Trategic Objective

- Achieving top decile funding level on a market-value basis relative to a universe of public pension funds
- Achieving progress toward a 100% funding goal
- Achieving or exceeding a 7.25% annual return over the long term (over 5, 10 and 15 year basis).
- Outperforming the total portfolio benchmark (over 3, 5 and 10 year basis)

Les Result Area

## Customer Engagement

To foster and maintain engaged members and employers

Trategic Objective

- Achieving top decile
   "American Customer
   Satisfaction Index" (ACSI)
   ranking on Cobalt Survey
- Exceeding the 3 NPS Benchmarks (Financial, Business Services and Government) on Member and Employer engagement surveys

Ley Result Area

## Workforce Engagement

To foster and maintain an engaged workforce

Trategic Objective

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

Ley Result Area

## **Operational Excellence**

To provide world class customer service at a reasonable cost

Trategic Objectiv

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

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

## 2021



#### LOCALLY FUNDED, FINANCIALLY SOUND

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