2021 EMPLOYER RATE WEBINAR

PRESENTED BY

Brian Collins
Executive Director

and

Mark Nannini
Chief Financial Officer
Agenda

- Introduction
- Financial update
- General rate-making principles
- Annual documentation
- Looking ahead
Our Board of Trustees

4 ELECTED BY EMPLOYERS

Sue Stanish
Director of Finance
Naperville Park District

Tom Kuehne
Finance Director/Treasurer
Village of Arlington Heights

David Miller
Executive Director
North Shore Water Reclamation District

Gwen Henry
Treasurer
DuPage County

1 ELECTED BY RETIRED MEMBERS

Louis Kosiba
Retired Executive Director
IMRF

3 ELECTED BY MEMBERS

Tracie Mitchell
Communications Specialist
Central IL Regional Dispatch Center

Natalie Copper
School-age Child Care Site-coordinator
Dawes School in Evanston

Peter Stefan
Finance Director/Treasurer
Village of Lake in the Hills

If you want to run for Trustee, the candidate packet will be available on June 30, 2021, on www.IMRF.org

Locally funded, financially sound.
COVID-19 and IMRF

IMRF is secure, agile, and proactive.

- Fully adapted to operational challenges posed by COVID-19
- Providing all key services to members and employers
- Staff is pivoting between in-person and remote work
2020 financial results

$5.1 BILLION ASSET CHANGE

$49.9 BILLION IN ASSETS

14.98% GROSS RATE OF RETURN

All figures are as of 12/31/2020
Updated actuarial funded status

<table>
<thead>
<tr>
<th>Year</th>
<th>Funded Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>'11</td>
<td>83.0</td>
</tr>
<tr>
<td>'12</td>
<td>84.3</td>
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<tr>
<td>'13</td>
<td>87.6</td>
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<tr>
<td>'14</td>
<td>87.3</td>
</tr>
<tr>
<td>'15</td>
<td>88.4</td>
</tr>
<tr>
<td>'16</td>
<td>88.9</td>
</tr>
<tr>
<td>'17</td>
<td>92.9</td>
</tr>
<tr>
<td>'18</td>
<td>90.0</td>
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<tr>
<td>'19</td>
<td>90.7</td>
</tr>
<tr>
<td>'20</td>
<td>94.1</td>
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2020
94.1% FUNDED
IMRF recovered from the economic disruption

03/31/2020 – 12/31/2020

- $38.2 Billion (03/31/2020)
- $49.9 Billion (12/31/2020)

$11.7 Billion Increase
03/31/2020 – 12/31/2020
Investment returns: strong but volatile
Regular Plan employer contribution contribution rates

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
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</thead>
<tbody>
<tr>
<td>'05</td>
<td>9.25%</td>
</tr>
<tr>
<td>'06</td>
<td>10.04%</td>
</tr>
<tr>
<td>'07</td>
<td>9.72%</td>
</tr>
<tr>
<td>'08</td>
<td>9.47%</td>
</tr>
<tr>
<td>'09</td>
<td>9.27%</td>
</tr>
<tr>
<td>'10</td>
<td>11.89%</td>
</tr>
<tr>
<td>'11</td>
<td>12.14%</td>
</tr>
<tr>
<td>'12</td>
<td>12.42%</td>
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<tr>
<td>'13</td>
<td>12.85%</td>
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<td>'14</td>
<td>12.58%</td>
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<td>'15</td>
<td>11.69%</td>
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<td>'16</td>
<td>11.73%</td>
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<tr>
<td>'17</td>
<td>11.34%</td>
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<tr>
<td>'18</td>
<td>11.24%</td>
</tr>
<tr>
<td>'19</td>
<td>9.06%</td>
</tr>
<tr>
<td>'20</td>
<td>10.91%</td>
</tr>
<tr>
<td>'21</td>
<td>10.62%</td>
</tr>
<tr>
<td>'22</td>
<td>8.59%</td>
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</tbody>
</table>
Investment returns of NASRA public pensions

Investment Returns

Nationwide Median Investment Returns

Years Ended 12/31/2020

IMRF’s ASSUMED RATE OF RETURN 7.25%

Locally funded, financially sound.
Assumed Rate of Return for all NASRA funds

NASRA
NATIONAL ASSOCIATION OF STATE RETIREMENT ADMINISTRATORS

Distribution of Nominal Investment Return Assumptions, FY 01 to present

NASRA

2021 AVERAGE ASSUMED RATE OF RETURN
7.18%
Investment return expectations looking forward

<table>
<thead>
<tr>
<th></th>
<th>Wilshire</th>
<th>GRS CMAM 2019 Survey</th>
<th>GRS CMAM 2020 Survey</th>
<th>Horizon Survey</th>
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</thead>
<tbody>
<tr>
<td><strong>10-year forecast</strong></td>
<td>5.09%</td>
<td>6.32%</td>
<td>5.85%</td>
<td>6.49%</td>
</tr>
<tr>
<td><strong>20-year forecast</strong></td>
<td>5.81%</td>
<td>7.07%</td>
<td>6.71%</td>
<td>7.16%</td>
</tr>
</tbody>
</table>

*Based on inflation assumption of 1.80% for Wilshire and 2.25% for Surveys*
General rate-making principles

- Reserve accounts
- How your rates are calculated
- Understanding demographic impacts on rates
- Actuarial assumptions
2021 Pension Dollar

The IMRF Pension Dollar
Pensions are a shared responsibility.
Every dollar paid to IMRF retirees comes from three sources:

- 66¢ IMRF Investment Earnings
- 23¢ IMRF Employers
- 11¢ IMRF Members

Locally funded, financially sound.
Reserve accounts and funded status

Employer Reserve serves as a “Balancing Account.”

Member Reserve and Annuitant Reserve accounts must be kept at 100% funded status. IMRF credits these accounts 7.25% yearly.
Investment gain distribution in 2020

Employer Reserve $4.09 Billion
Annuitant Reserve $1.86 Billion
Member Reserve $0.48 Billion

Figures do not include member and employer contributions or transfers to Annuitant Reserves.
As an agent multiple employer plan, each employer has a separate reserve account.

Each employer has its own reserve account.

Your employer pays for the retirement benefits of only its employees.

How your employer reserve account works:

- Credited with contributions made by your employer.
- Credited investment gain or loss.
- Debited retirement costs of your employees.

Your employer’s finances have no relationship to the pension assets and liabilities of IMRF’s other 3,031 employers.
If an employer is less than 100% funded on an actuarial basis as of 12/31/2020

**Taxing Bodies**
- 21-year closed amortization period to achieve 100% funded status.

**Instrumentalities**
- 10-year reopening amortization period to achieve 100% funded status.
  - Recalculated every year (unlimited time to achieve 100% funded status)
Rate impact from investment results smoothed over a five-year period

General rate-making principles

- Only 1/5th of investment gain/loss is recognized annually.
- There is a two-year lag before investment results impact employer rates.

This line represents the impact of IMRF’s investment results on employer contributions.

Illustration only. Not representative of IMRF’s actual investment experience.

Locally funded, financially sound.
5 parts of the employer rate

Each part is calculated separately and used for specific purposes designated by state law.

- Normal Retirement Contributions
- Disability Benefit Contributions
- Death Benefit Contributions
- Supplemental Retirement Contributions ("13th Payment")
- Unfunded Liability Contributions
How is your employer’s rate calculated?

1. IMRF provides demographic and financial data as of year-end to IMRF’s actuaries.

2. Actuaries apply assumptions to the demographic and financial data.

3. The actuaries then produce an actuarial valuation for IMRF.

4. Actuaries rely on the valuation to set contribution rates for each employer.
3 common demographic reasons why your employer rate can increase

The size of your workforce decreases

Deferred membership

Vested members terminate and leave their contributions with IMRF

Employee Retirements
Your specific employer’s rate is designed to achieve a 100% funding level.

- 100% funding means your employer will have all the funds needed to pay its pension obligations when its employees retire.
Actuarial assumptions

Used to calculate how much money needs to be set aside to fund future benefits.

IMRF Board sets assumptions

- Economic and Demographic
- Updated every three years
Assumptions defined

Demographic Assumptions
- Active members that quit (withdrawal rates)
- Disability for active members
- Retirement for active members
- Merit and longevity pay for active members
- Mortality for active members, retirees, and their beneficiaries

Economic Assumptions
- Price inflation = 2.25%
- Wage inflation = 2.75%
- Payroll growth = 2.75%
- Investment return assumption = 7.25%

Non-economic Assumptions
- Mortality rates
  - Before retirement
  - After retirement
- Disability rates
- Rates of retirement
- Rates of separation from employment (Refunds)
- Marriage probabilities of active members
Actual experience compared to actuarial assumptions

What happens when IMRF’s actual experience does not align with its economic and demographic actuarial assumptions?

Any variance between our assumptions and our actual experience impacts your contribution rates.
Variance in assumptions

Some variances are out of your control as an employer.

Example
IMRF assumes a certain percentage of your workforce will file for disability at some point.

If in reality, a greater percentage of your workforce files for disability over time, this will increase your employer contribution rate in future years.

Some variances are in your control as an employer.

Example
IMRF assumes that your workforce’s wages will grow by 2.75% annually.

If your workforce’s wages grow by 5% annually, this will increase your employer contribution rate in future years.
Annual documentation

There are two main purposes for our documentation:

- **Projects your future costs**
  - Employer Reserve Statement
  - Rate Notices
- **Financial reporting**
  - GASB Statements
  - Schedule of Changes in Fiduciary Net Position
  - SOC-1 Type 2 Report
Employer Reserve Statement

Projects your future costs

This statement shows your employer’s funds on deposit as of January 1

- Credits
- Debits
- Adjustments
Preliminary & Final Rate Notices

These statements show your employer’s rate for the year.

- “Preliminary Rate Notice” in April
- “Final Rate Notice” in November
**GASB 50 Disclosure Statement**

**This statement shows your funded status**

- Does not include retirees
- Shows status broken out by plan

<table>
<thead>
<tr>
<th>Actuarial Valuation Date</th>
<th>Actuarial Value of Assets (a)</th>
<th>Actuarial Accrued Liability (AAL) (b)</th>
<th>unfunded AAL (UAAL) (b-a)</th>
<th>Funded Ratio (c)</th>
<th>UAAL as a Percentage of Covered Payroll (b-a)/(f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/31/20</td>
<td>$5,661,533</td>
<td>$7,818,256</td>
<td>$2,156,723</td>
<td>72.41</td>
<td>$3,535,596</td>
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<tr>
<td>12/31/19</td>
<td>$5,434,133</td>
<td>$7,660,727</td>
<td>$2,246,594</td>
<td>71.91</td>
<td>$2,680,390</td>
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<tr>
<td>12/31/18</td>
<td>$4,864,864</td>
<td>$7,525,565</td>
<td>$2,661,201</td>
<td>74.34</td>
<td>$3,253,911</td>
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</table>

On a market value basis, the actuarial value of assets as of December 31, 2020 is $8,018,185. On a market basis, the funded ratio would be 79.0%.

The actuarial value of assets and accrued liability cover active and inactive members who have service credit with this sample employer. They do not include amounts for retirees. The actuarial accrued liability for retirees is 100% funded.

Financial reporting

Locally funded, financially sound.
This statement also shows funded status.

- Used by employers who do GAAP reporting
- This funded status includes retirees
- Will be HIGHER for more employers
Schedule of Changes in Fiduciary Net Position

This statement shows Fiduciary Net Position by employer:

- Available in May
- Needed by employers who GAAP report
SOC-1 Type 2 Report

Financial reporting

This statement verifies IMRF’s strict internal controls

- Available in March
- Relieves your auditors from having to test IMRF data
Looking ahead

- IMRF’s financial progress since 1980
- Growth in Tier 2 membership
- New technology at IMRF
- Web-Centric Initiative
Growth of $1 since 1980

Looking ahead

$45.46
IMRF

$38.93
MSCI All Country World Index

$19.20
Bloomberg Barclays U.S. Aggregate Index
Number of active Regular Plan members

![Bar chart showing the number of active Regular Plan members from 2011 to 2020.](image)

- **Looking ahead**

Locally funded, financially sound.

Malcolm Baldrige
National Quality Award
2019 Award Recipient
Technology modernization project

- IMRF is modernizing the technologies and processes it uses for pension administration.
- The project will improve the way employers and members interact with IMRF.
- More transactions will go online, particularly for employers, enabling faster and more modern communication.
- IMRF will provide training for employers before rollout of the new systems in 2022.

To support this initiative, encourage your members to create Member Access accounts!
Estimated Total Savings in 2020

$405,000*

*Postage and Paper Savings

2,668,524

Pages not printed in 2020
Do you know someone who did not attend today but would benefit from this information?

They can register at IMRF.org
Questions?

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