Introductions

NEW EXECUTIVE DIRECTOR

Brian Collins

- Joined IMRF January 8, 2018
- Formerly worked in finance and government
NEW EXECUTIVE DIRECTOR

Brian Collins

- BA from DePaul University
- Law Degree from Loyola University
- MBA from The Ohio State University
IMRF began operations in 1941. Between 1941 and 1946, IMRF had no executive director. Actuary and Clerk A.S. Hanson oversaw operations.
Key Results for 2017

IMRF RECEIVED ILPEx GOLD AWARD FOR “ACHIEVEMENT OF EXCELLENCE”

Our Journey of Excellence

- Began in 2008
- 1 of only 2 public-sector entities in Illinois to receive Gold
- Plan to apply for Malcolm Baldrige National Quality Award in 2018
Key Results for 2017

GROSS INVESTMENT RETURN

$5.758 Billion in Gross Investment Income

15.96% Gross Investment Rate of Return
Key Results for 2017

**INVESTMENT RETURN AFTER FEES**

$5.758 - $156 = $5.602

- **BILLION IN GROSS INVESTMENT INCOME**
- **MILLION IN INVESTMENT & ADMINISTRATIVE FEES**
- **BILLION GAINED IN 2017**
Key Results for 2017
CREDITS TO RESERVES

BILLION GAINED IN 2017

$5.602 Billion

- $1.841 Billion

$3.761 Billion

BILLION COMBINED
- Annuitant Reserve Credit $1.4006 Billion
- Member Reserve Credit $440.5 Million

BILLION CREDITED TO EMPLOYER RESERVE
Key Results for 2017

EMPLOYER RESERVE CREDIT

$3.761 BILLION

The average employer account was credited 51.12% interest on opening balance.
Key Results for 2017

MARKET FUNDED STATUS

2016: 88%
2017: 97.1%
Key Results for 2017

ACTUARIAL FUNDED STATUS

2016: 88.9%
2017: 92.9%
### Key Results for 2017

Each employer’s funded status varies.

<table>
<thead>
<tr>
<th>Funded Status</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 50%</td>
<td>339</td>
</tr>
<tr>
<td>50%-54%</td>
<td>47</td>
</tr>
<tr>
<td>55%-59%</td>
<td>64</td>
</tr>
<tr>
<td>60%-64%</td>
<td>93</td>
</tr>
<tr>
<td>65%-69%</td>
<td>135</td>
</tr>
<tr>
<td>70%-74%</td>
<td>193</td>
</tr>
<tr>
<td>75%-79%</td>
<td>269</td>
</tr>
<tr>
<td>80%-84%</td>
<td>364</td>
</tr>
<tr>
<td>85%-89%</td>
<td>356</td>
</tr>
<tr>
<td>90%-94%</td>
<td>326</td>
</tr>
<tr>
<td>95%-99%</td>
<td>233</td>
</tr>
<tr>
<td>100%-104%</td>
<td>157</td>
</tr>
<tr>
<td>105%-109%</td>
<td>113</td>
</tr>
<tr>
<td>110%-114%</td>
<td>73</td>
</tr>
<tr>
<td>115%-119%</td>
<td>41</td>
</tr>
<tr>
<td>120%-124%</td>
<td>47</td>
</tr>
<tr>
<td>125%-129%</td>
<td>19</td>
</tr>
<tr>
<td>130%-134%</td>
<td>18</td>
</tr>
<tr>
<td>135%-139%</td>
<td>5</td>
</tr>
<tr>
<td>140%-144%</td>
<td>13</td>
</tr>
<tr>
<td>145%-149%</td>
<td>11</td>
</tr>
<tr>
<td>Over 150%</td>
<td>131</td>
</tr>
</tbody>
</table>
Do you understand how IMRF determines how much your employer needs to contribute every month?

Mark Nannini
Chief Financial Officer
General Rate-Making Principles

YOUR EMPLOYER PAYS FOR THE RETIREMENT BENEFITS OF ONLY IT’S EMPLOYEES

How your Employer Reserve Account works.
- Credited with contributions made by your employer.
- Credited investment gain or loss made on contributions.
- Debited retirement costs of your employees.

Your employer’s finances have no relationship to the pension assets and liabilities of IMRF’s other 3,000 employers.
**General Rate-Making Principles**

**HOW YOUR EMPLOYER’S RATE IS 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.
**General Rate-Making Principles**

**WHAT HAPPENS TO MONEY SENT TO IMRF?**

IMRF has $41.3 Billion in assets spread across 3 main accounts:

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member Reserve</td>
<td>$6.9 Billion</td>
</tr>
<tr>
<td>Employer Reserve</td>
<td>$12.4 Billion</td>
</tr>
<tr>
<td>Annuitant Reserve</td>
<td>$22.0 Billion</td>
</tr>
</tbody>
</table>
**General Rate-Making Principles**

**RESERVE FUNDED STATUS**

*Member Reserve and Annuitant Reserve accounts must be kept at 100% funded status. IMRF credits these accounts 7.5% yearly.*

**Employer Reserve serves as a “Balancing Account.”**

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*Member Reserve and Annuitant Reserve accounts must be kept at 100% funded status. IMRF credits these accounts 7.5% yearly.*
General Rate-Making Principles

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
General Rate-Making Principles

ASSUMPTIONS

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
- Lowering price inflation from 2.75% to 2.5%
- Lowering wage inflation from 3.5% to 3.25%
- Lowering payroll growth from 3.5% to 2.5%
General Rate-Making Principles

AVERAGE EMPLOYER CONTRIBUTION FOR REGULAR PLAN TO DROP IN 2019

This is a percentage decrease of 19.4% from 2018 to 2019.

11.24% (2018)

9.06% (2019)
General Rate-Making Principles

RECENT HISTORY OF REGULAR PLAN EMPLOYER CONTRIBUTION RATES

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
</tr>
</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>
</tr>
<tr>
<td>'13</td>
<td>12.85%</td>
</tr>
<tr>
<td>'14</td>
<td>12.58%</td>
</tr>
<tr>
<td>'15</td>
<td>11.69%</td>
</tr>
<tr>
<td>'16</td>
<td>11.73%</td>
</tr>
<tr>
<td>'17</td>
<td>11.34%</td>
</tr>
<tr>
<td>'18</td>
<td>11.24%</td>
</tr>
<tr>
<td>'19</td>
<td>9.06%</td>
</tr>
</tbody>
</table>
General Rate-Making Principles

INVESTMENT RETURN ASSUMPTION

FISCAL YEAR

IMRF CURRENT ASSUMED RATE OF RETURN

7.5%
The Board of Trustees considered changing the assumed rate of return from 7.5% to 7.25%.

They discussed the following factors:

- **IMRF’s recent asset-liability modeling study**
  - IMRF has a close to 50% probability of achieving the expected rate of return over a 30-year investment horizon

- **IMRF’s investment portfolio has achieved a total annualized return of 10.05% since 1982**

Ultimately the board decided to maintain a 7.5% return assumption.
## General Rate-Making Principles

**LOWER ASSUMPTION MEANS POTENTIALLY HIGHER EMPLOYER CONTRIBUTION RATES**

<table>
<thead>
<tr>
<th></th>
<th>7.5%</th>
<th>7.25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assumed Rate of Return</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee Contributions</td>
<td>4.5%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Investment Income (Billions)</td>
<td>$41.3 \times 7.5%</td>
<td>$41.3 \times 7.25%</td>
</tr>
<tr>
<td>Employer Contribution Rates (Blended)</td>
<td>9.06%</td>
<td>11.26%</td>
</tr>
<tr>
<td>Employer Contributions (Millions)</td>
<td>$786</td>
<td>$966</td>
</tr>
</tbody>
</table>

**22.9% Increase**
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.
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 3.25% annually. If your workforce’s wages grow by 5% annually, this will increase your employer contribution rate in future years.
INVESTMENT EARNING VARIABILITY

- 2015: .20%
- 2016: 7.77%
- 2017: 15.73%

Total Increase: 7.5%
There are two main purposes for our documentation

**Projects your future costs**
- Employer Reserve Statement
- Rate Notices

**Financial reporting**
- GASB Statements & Reporting
- SOC-1 Type 2 Report
This statement shows your employer’s funds on deposit as of January 1

- **Credits**
- **Debits**
- **Adjustments**
These statements show your employer’s rate for the year.

- “Preliminary Rate Notice” will be sent earlier in the year
Annual Documentation
GASB 50 DISCLOSURE STATEMENT

Financial reporting

This statement shows your funded status
- Does not include retirees
- Shows status broken out by plan.

GASB 50 RSI Information for Employers

<table>
<thead>
<tr>
<th>Actuarial Valuation Date</th>
<th>Actuarial Value of Assets</th>
<th>Actuarial Accrued Liability (AAL)</th>
<th>Unfunded (ARAL)</th>
<th>Funded Ratio (a/b)</th>
<th>Covered Payroll (c)</th>
<th>UAAL as a Percentage of Covered Payroll (b-a)/(c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/31/17</td>
<td>$27,426,050</td>
<td>$40,584,280</td>
<td>$13,158,250</td>
<td>67.58</td>
<td>$17,017,955</td>
<td>77.37</td>
</tr>
<tr>
<td>12/31/16</td>
<td>$25,815,545</td>
<td>$42,185,293</td>
<td>$16,365,788</td>
<td>61.40</td>
<td>$17,534,916</td>
<td>69.54</td>
</tr>
<tr>
<td>12/31/15</td>
<td>$29,947,108</td>
<td>$34,175,023</td>
<td>$14,226,985</td>
<td>67.79</td>
<td>$14,350,449</td>
<td>87.02</td>
</tr>
</tbody>
</table>

On a market value basis, the actuarial value of assets as of December 31, 2016 is $26,797,059. On a market basis, the funded ratio would be 66.03%.

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

GASB 68 DISCLOSURE STATEMENT

Financial reporting

This statement also shows funded status.

- Used by Employers who do GAAP reporting
- This funded status includes retirees
- Will be HIGHER for more employers.
Financial reporting

This statement shows Fiduciary Net Position by employer

- Comes out in May
- Needed by ER’s who GAAP report
Annual Documentation

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
Points to Remember

2017 IMRF PENSION DOLLAR

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

- **64¢**
  IMRF Investment Earnings

- **24¢**
  IMRF Employers

- **12¢**
  IMRF Members
Points to Remember

INVESTMENT RETURN ASSUMPTION

IMRF CURRENT ASSUMED RATE OF RETURN

7.5%
Points to Remember

NUMBER OF ACTIVE REGULAR PLAN MEMBERS

<table>
<thead>
<tr>
<th>Year</th>
<th>Tier 1</th>
<th>Tier 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>11,063</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>20,839</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>30,074</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>38,991</td>
<td>47,393</td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td>55,843</td>
</tr>
<tr>
<td>2016</td>
<td>115,328</td>
<td>107,916</td>
</tr>
<tr>
<td>2017</td>
<td>63,913</td>
<td></td>
</tr>
</tbody>
</table>
Points to Remember

YOUR EMPLOYER MAY BE AUDITED

IMRF has 175,000 active members

- Each year we audit employers who cumulatively represent 20% of those member records

Typical Audit findings

- Ineligible wages
- Incorrectly tracked hours
Points to Remember

IMRF’S TARGET ASSET ALLOCATION

- U.S. Equity: 37%
- Fixed Income: 28%
- International Equity: 18%
- Alternatives: 9%
- Real Estate: 7%
- Cash: 1%
Points to Remember

GROSS RETURNS OVER A 36-YEAR PERIOD

Total Annualized Return (1982-2017): 10.05% gross of fees

- 21 periods > 9.99%
- 5 periods = 7.49% - 0%
- 4 periods = 9.99% - 7.5%
- 6 periods < 0%
Points to Remember

GROWTH OF $1

- **$34.52**
  - IMRF

- **$29.20**
  - MSCI All Country World Index

- **$16.42**
  - Bloomberg Barclays U.S. Aggregate Index
Points to Remember

QUESTIONS
Appendix

WHAT IS IMRF?

IMRF is an agent, multiple employer system

- “Entry Age Normal” valuation system
This means your pension funds will be there when you need them
- Prefunded
Appendix

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.

Adopted September 26, 1991
IMRF’s benefits are guaranteed by the Illinois Constitution, and can only be changed for new members. The Illinois Supreme Court has affirmed your constitutional right to not have your pension benefits diminished.
Appendix

OTHER SIGNIFICANT DEVELOPMENTS IN 2017

The IMRF Board of Trustees made it policy that cash payments in lieu of healthcare are not considered IMRF earnings, unless your employer passes an affirmative resolution making those payments IMRF-reportable earnings.

Also, payouts for banked vacation – if paid within the final 3 months of a member’s FRE period – are exempt from the Accelerated Payment calculation.
### Appendix

**AVERAGE COST PROJECTIONS FOR 2019**

<table>
<thead>
<tr>
<th></th>
<th>REGULAR</th>
<th>SLEP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RETIREMENT</strong></td>
<td>8.27%</td>
<td>17.64%</td>
</tr>
<tr>
<td><strong>DISABILITY &amp; DEATH</strong></td>
<td>.17%</td>
<td>.17%</td>
</tr>
<tr>
<td><strong>13TH PAYMENT</strong></td>
<td>.62%</td>
<td>.62%</td>
</tr>
<tr>
<td><strong>SLEP SUPPLEMENTAL LIABILITIES</strong></td>
<td>-</td>
<td>2.07%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>9.06%</td>
<td>20.50%</td>
</tr>
</tbody>
</table>
Appendix

CONTACT US

Brian Collins  
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Phone: 630-368-5355

Mark Nannini  
Email: mnannini@imrf.org  
Phone: 630-368-5345

Employer 800-number  
1-800-728-7971

IMRF website  
www.imrf.org

- Comprehensive Annual Financial Report  
- Annual Budget  
- GASB 68 Resource Page  
- GASB 50 (Employer Access)  
- SOC-1 Document (Employer Access)