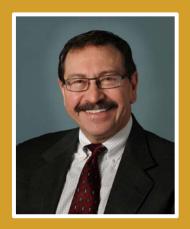
2017 RATE MEETING Webinar

Presented by:



Louis W. Kosiba Executive Director



Mark Nannini Chief Financial Officer



Agenda

- General Rate-Making Principles
- Annual Documentation
- 2016 Investment Income
- Points to Remember
- Appendix

Please ask questions any time during the presentation.



Each Employer:

- Makes contributions intended to pre-fund retirement benefits for its employees *only*
- ➤ Has a separate reserve account
- ➤ Has contributions invested in a pool
- ➤ Has liabilities calculated based on actuarial assumptions set by IMRF and unique events within your workforce



IMRF provides demographic and financial data to actuaries

Actuaries apply assumptions to demographics and financial data

Actuaries produce 12/31/16
Actuarial Valuation

Employer Contribution Rates are set for 2018

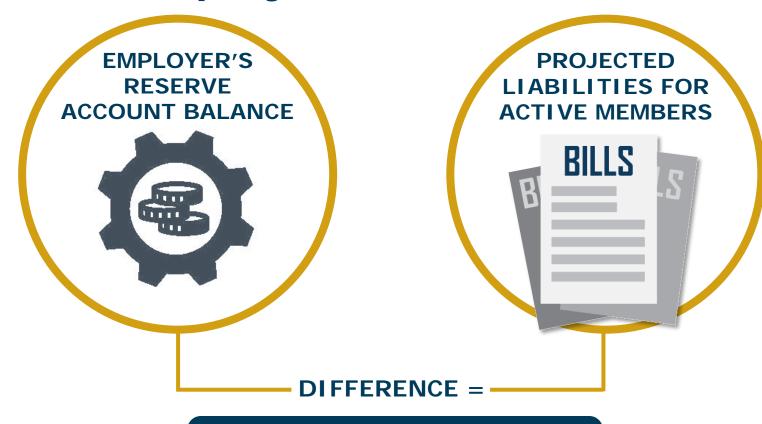


IMRF assets are held in three "reserve accounts:"

Members \$6.7 Billion 100% Funded

Retirees \$21.1 Billion 100% Funded Employers \$8.6 Billion (Balancing Account)

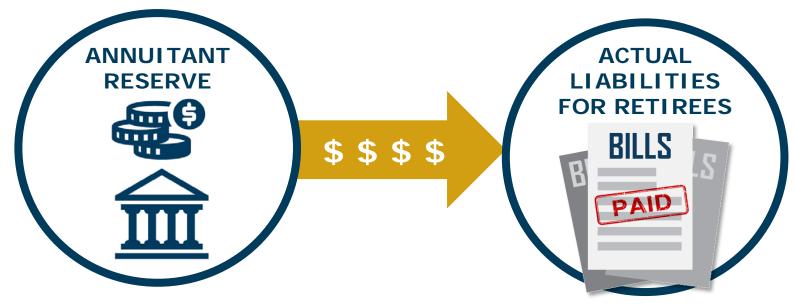
Employer Funded Status



EMPLOYER FUNDED STATUS



The Annuitant Reserve is fully funded



- Liabilities for retirees are 100% funded
- This is not reflected in the GASB 50 Statement
- This is reflected in your employer's funded status for GASB 68

GASB = Governmental Accounting Standards Board



Economic Assumptions

1. Price inflation:

2.75%

2. Wage inflation:

3.5%

3. Investment return:

7.5%

Triennial Assessment due later in 2017.

What happens if the 7.5% investment return assumption dropped to 7.0%?

CURRENT 7.5%

NEW 7.0%

EMPLOYEE CONTRIBUTION:

4.5% of \$7 billion

\$315 million

\$315 million

INVESTMENT INCOME:

7.5% of \$36 billion

\$2.7 billion

\$2.52 billion

EMPLOYER CONTRIBUTION:

11.24% of \$7 billion

\$786 million

\$966 million

A 22.9% INCREASE



General Rate-Making Principles Non-economic Assumptions

- 1. Mortality rates before and after retirement
- 2. Disability rates
- 3. Rates of retirement
- 4. Probabilities of an active member being married
- 5. Rates of separation from employment (Refunds)

Will be reviewed with the Triennial Assessment in 2017.

General Rate-Making Principles Causes for rate changes

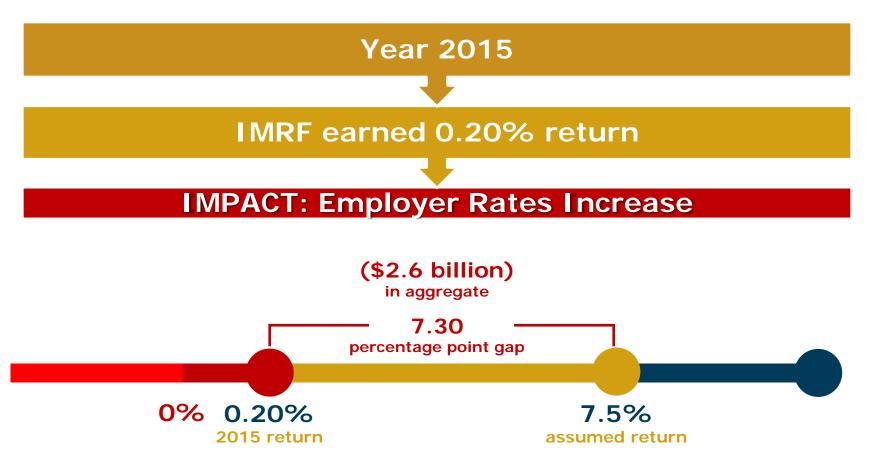
UNIVERSAL

- ➤ Investment returns more or less than 7.5% net
- Legislative changes, such as Tier 2
- Periodic adjustments to actuarial assumptions

UNIQUE

- Wages paid to employees being more or less than assumed
- Rates of disability, retirement, or separation differing from assumptions

If 7.5% is not reached ...



If 7.5% is exceeded ...





Investment returns and employer rates

- Returns are "smoothed" over a five-year period for rate-setting purposes (Actuarial)
 - Only 1/5th of investment gain or loss recognized annually (over the assumed return)
- Two-year lag between returns and rate impact
 - i.e.: Year 2016 returns will impact 2018-2022 rates



Calendar Year	Percentage Return (gross)	Dollar Return	1/5 Recognition
2016	8.0%	\$2,735,819,894	\$547,163,978
2015	0.44%	\$200,727,209	\$40,145,442
2014	6.01%	\$2,001,420,871	\$400,284,174
2013	20.26%	\$5,583,120,005	\$1,116,624,001
2012	13.75%	\$3,393,689,073	\$678,737,815



Annual Documentation Employer Reserve Statements:

- IMRF provided Employer Reserve Statements in February 2017
- Statements show employer funds on deposit for current active and inactive members, and current year activity:
 - Interest credited @ 7.5% less funding for employee and annuitant reserves
 - Employer retirement contributions
 - Adjustments (if any)
 - Reductions for 2016 retirees

Annual Documentation

MODMAI COCT

2016 EMPLOYER RETIREMENT RESERVE STATEMENT REGULAR RESERVE ACCOUNT

COLO DICABILITAN

NORMAL COST	6.810	DISABILITY	.140
FUNDING ADJ OVR/UN	ND 5.140	DEATH	.160
		SUPPLEMENTAL PENSION	.620
RETIREMENT	11.950		
OPENING BALANCE, JANUARY	1, 2016		13,510,319.35
INTEREST ON OPENING BALANC	CE - RATE:	7.500%	1,013,273.95
EMPLOYER RETIREMENT CONTRI	BUTIONS (11	950% X 17,017,954.97	2,033,645.49
RESIDUAL INVESTMENT LOSS (CHARGE		321,925.18-
CHARGE/CREDIT MISC MBR ADJ	J		207.71-
CORRECTION OF ER CONTRIBUT	TIONS		3,724.94
CREDIT ER FOR RET RESERVE	CONT		2,825,053.56
TOTAL MEMBER AND SURVIVOR	ANNUITIES C	OST	4,108,161.74-
ENDING BALANCE, DECEMBER 3	31, 2016		14,955,722.66



140

Annual Documentation

Preliminary Rate Notices

- Issued April 2017
- IMRF staff reviews rates to ensure accuracy
- Employer inquiries are addressed

Final Rate Notices

- Available November 2017



Final Notice of Illinois Municipal Retirement Fund Contribution Rate for Calendar Year 2017

Date November 2016

Employer name ANYWHERE SD Employer No. 00000

	IMRF Contributions Regular
Member Contributions (tax-deferred)	4.50%
Employer Contributions • Retirement Rate	
Normal Cost	6.60%
Funding Adjustment <over> under</over>	5.51%
Net Retirement Rate	12.11%
Other Program Benefits	
Death	0.16%
Disability	0.12%
Supplemental Benefit Payment	0.62%
Early Retirement Incentive	0.00%
TOTAL EMPLOYER RATE	13.01%



Annual Documentation

GASB 50 Disclosures (Available Now)

- Shows funded status of each employer's plan for last 3 years for active and inactive members *only*
- Reflects actuarial funded status using five-year smoothing of investment returns subject to 20% corridor
- Footnote on schedule discloses funded status on market basis



GASB 50 RSI Information for Employers

Anywhere County
EMPLOYER NUMBER: 00000R
REQUIRED SUPPLEMENTARY INFORMATION
Schedule of Funding Progress

	A	ctuarial Accrue	ed			UAAL as a
Actuarial Valuation Date	Actuarial Value of Assets (a)	Liability (AAL) -Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	Percentage of Covered Payroll ((b-a) /c)
12/31/16 12/31/15	\$27,426,050 \$25,815,545	\$40,584,280 \$42,185,293	\$13,158,230 \$16,369,748	67.58 61.20	\$17,017,955 \$17,536,916	
12/31/14	\$29,947,108	\$44,175,603	\$14,228,495	67.79	\$16,350,449	87.02

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 Documents

(Available April 2017 and May 2017)



SOC-1 Type 2 Report

(Available for April 1, 2016-March 31, 2017)

Unaudited Numbers

IMRF exceeded its annual investment return goal of 7.5%

Estimated (net) Investment Return

7.71%

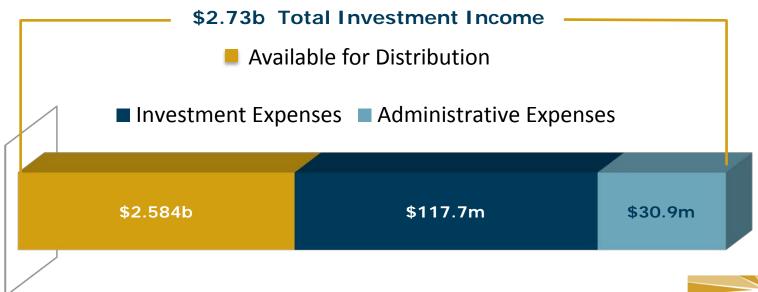
Estimated Investment Income

\$2.584 Billion



What did the return mean for 2016?

- \$2.73 billion investment income (not including):
 - > \$117.7 million of investment expenses
 - > \$30.9 million of administrative expenses



What did a (net) 7.71% return mean for 2016?

- Credited \$1.7 billion of interest to Annuitant Reserve
 - ➤ Balance \$21.1 billion
- Credited \$430 million to Member Reserve
 - ➤ Balance \$6.7 billion

What did a 7.71% (net) return mean for 2016?

- Credited \$100 million to Employer Reserves:
 - ➤ Balance \$8.6 billion
 - ➤ Included (\$176.9 million) of residual loss for 2016
 - ➤ Percentage for individual employers varies based upon relationship between its employer reserve and annuitant reserve compared to the total of all employers reserves

2016

Members \$6.7 Billion (100% Funded)

Employers \$8.6 Billion (Balancing Account) Retirees \$21.1 Billion (100% Funded)

2015

Members \$6.5 Billion 100% Funded **Employers** \$8.5 Billion (Balancing Account) Retirees \$19.4 Billion 100% Funded



Impact on Funding Ratio

➤ In 2016:

	BEGINNING OF 2016			
	Market Value	Actuarial Value		
Assets	\$34,513.09	\$34,913.13		
Liabilities	\$39,486.57	\$39,486.57		
Ratio	87.4%	88.4%		

END OF 2016			
Market Value	Actuarial Value		
\$36,481.50	\$36,773.40		
\$40,852.74	\$41,358.71		
89.3%	88.9%		

- > Funding Value and Market Value were impacted by:
 - Investment returns above 7.5%
- **Liabilities grew due to:**
 - One more year of service credit
 - Additional reasons, including interest, etc.



Magnitude of the Unfunded Liability

	2015	2016
Actuarial Liability	\$39.5b	\$41.4b
Actuarial Assets	<u>\$34.9b</u>	<u>\$36.8b</u>
Unfunded Actuarial Accrued Liability (UAAL)	\$ 4.6b	\$ 4.6b
Market Value of Assets	\$34.5b	\$36.4b
UAAL on Market Basis	\$5.0b	\$5.0b



- ✓ IMRF is a defined benefit plan
 - Benefits are based upon a formula that covers the final rate of earnings and years of service.
- ✓ IMRF's benefits are guaranteed by the Illinois Constitution and can only be changed prospectively by the Illinois legislature for new members.

• There are only three sources of funding:



• While member contributions are fixed by statute, investment income varies based on market returns and employer contributions fund the balance.

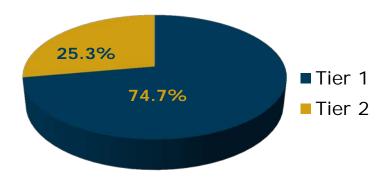


2018 Cost of the IMRF Program

	Regular	SLEP
Retirement	6.61%	11.63%
Disability & Death	.19%	.19%
13 th Payment	.62%	.62%
Unfunded Liabilities	3.82%	7.13%
SLEP Supplemental Liabilities	-	1.92%
TOTAL	11.24%	21.49%

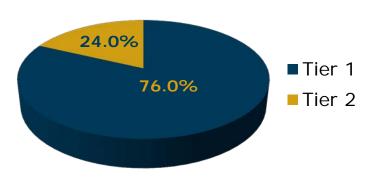
Impact of Tier 2 on <u>Blended</u> Normal Cost on the Regular Plan





Projected 2018 Wages

(as % of total IMRF wages)



2018 normal cost for Tier 1	7.29%
2018 normal cost for Tier 2	4.41%
2018 average blended normal cost for Regular Plan	6.61%

If an employer is less than 100% funded on an actuarial basis:

- 1. Taxing Bodies a 26-year closed period for 2017 (reducing to 15 years at which time it becomes a 15-year rolling period)
- 2. Instrumentalities a 10-year rolling period

ERI – up to 10 years at employer option

Employer Audits Result From ...

Typical reasons for an audit:

- > IMRF's goal: audit 20% of employers
- Whistleblowers
- Media issues

Typical findings from an audit:

- > Enrollment issues
- Incorrect wage reporting







Kevin DavisNortheast Territory
Field Representative

Northeast Territory includes:

- Lake County
- McHenry County
- Cook County north of Palatine/Willow Road
- Kane County north of Route 20

Contact Kevin:

P.O. Box 249, Harvard, IL 60033

Phone: (815) 943-4602

Fax: (630) 368-5397

Email: kdavis@imrf.org



Illinois Municipal Retirement Fund

Contact us:

- > Louis W. Kosiba
 - Email: lkosiba@imrf.org; Phone: 630-368-5355
- Dan Duquette
 - Email: dduquette@imrf.org; Phone: 630-368-5367
- 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 Resources (under the "Employers" tab)
- GASB 50 (in Employer Access)
- SOC-1 Type 2 Document (in Employer Access)



Appendix

IMRF is an Agent Multiple-Employer
 Public Employee Retirement System

Cost method of valuation:
 Aggregate Entry Age Normal

Appendix

IMRF Mission, Vision, and Values

Mission - 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.

Vision - To provide the highest quality retirement services to our members, their beneficiaries and employers.

Values - (REAACH)

Respect

Empathy

Accountability

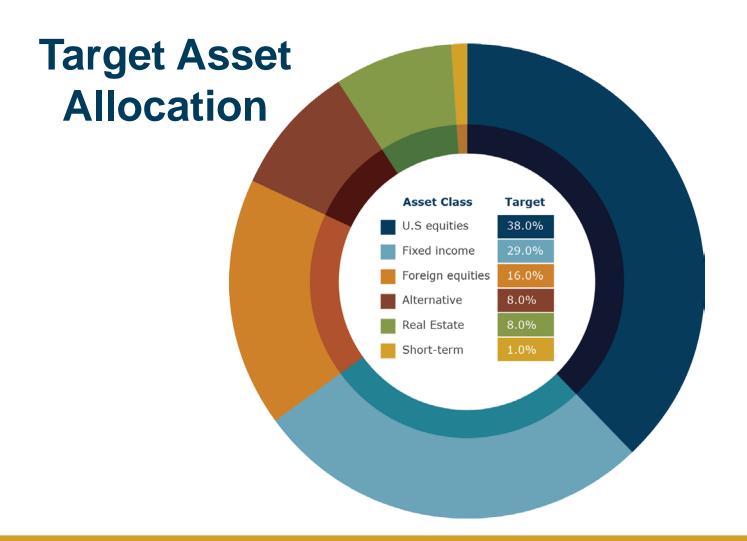
Accuracy

Courage

Honesty

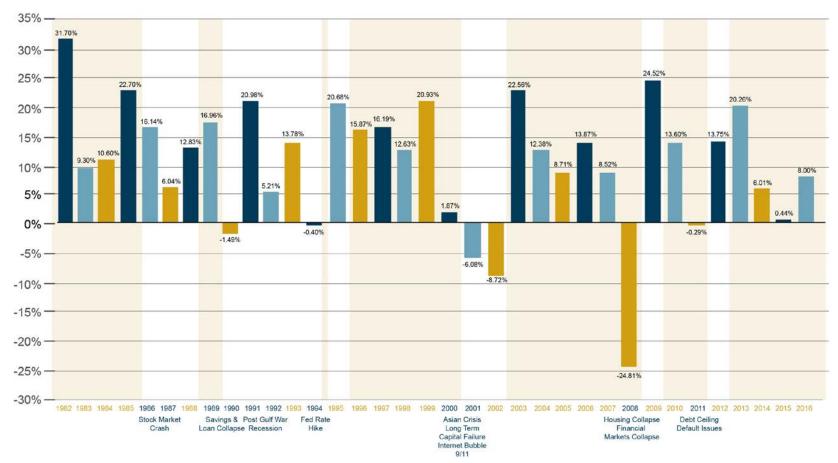


Appendix – Asset Allocation



Appendix – How is the money invested?

IMRF ANNUAL TOTAL FUND RETURNS (1982-2016)



- In 1982, began operating under the "Prudent Person Rule"
- 7.5% assumed return
- Annualized Total Fund return 1982-2016: 9.38%* *Gross of fees

- 6 periods in which IMRF lost money
- 11 periods < 7.5%
- 24 periods > 7.5%
- 20 periods double-digit returns



Appendix

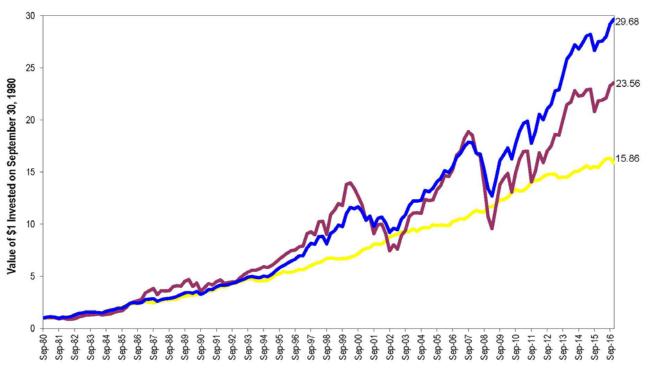
Funding Status Actuarial vs. Market 1990-2016



Appendix

The value of a diversified portfolio

Growth of a Dollar - As of December 31, 2016



Bloomberg Barclays U.S. Aggregate Index ——MSCI All-Country World Index ——IMRF

Thank you for attending!

2017 Rate Meeting Presentation

