

ILLINOIS MUNICIPAL RETIREMENT FUND ANNUAL ACTUARIAL VALUATION REPORT DECEMBER 31, 2014

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April 8, 2015

Board of Trustees Illinois Municipal Retirement Fund Oak Brook, Illinois 60521

Ladies and Gentlemen:

The results of the **December 31, 2014 annual actuarial valuations** of members covered by the Illinois Municipal Retirement Fund (IMRF) are presented in this report. The purpose of the valuations, as provided by Article 7 of the Illinois Pension Code, is to measure IMRF's funding progress and to establish contribution rates for the 2016 calendar year. This report should not be relied upon for any other purpose. This report may be distributed to parties other than the System only in its entirety and only with the permission of the Board.

The valuation was based upon information, furnished by IMRF staff, concerning Retirement Fund benefits, financial transactions, and individual members, terminated members, retirees and beneficiaries. Data was checked for internal and year to year consistency, but was not otherwise audited by us. As a result, we are unable to assume responsibility for the accuracy or completeness of the data provided. The valuations are based upon current plan provisions related to Regular Members, Sheriff's Law Enforcement Personnel (SLEP), and Elected County Officials (ECO) employment.

Future actuarial measurements may differ significantly from those presented in this report due to such factors as experience differing from that anticipated by actuarial assumptions, changes in plan provisions, actuarial assumptions/methods or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements.

To the best of our knowledge, this report is complete and accurate and the valuation was conducted in accordance with standards of practice prescribed by the Actuarial Standards Board and in compliance with the applicable state statutes. Brian Murphy and Mark Buis are independent of the plan sponsor and are Members of the American Academy of Actuaries (MAAA) who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. It is our opinion that the actuarial assumptions used for the valuation produce results which are reasonable.

Respectfully submitted,

Brian B. Murphy, FSA, EA, MAAA

Mark Buis, FSA, EA, MAAA

BBM/MB:sc

INTRODUCTION

IMRF is established under statutes adopted by the Illinois General Assembly. It is an agent multiple employer defined benefit pension plan that, as of December 31, 2014, encompasses 3,298 active plans and serves 423,509 active and inactive members and retired persons. Since IMRF reports information to us by plan, there are cases in which a person with employment in more than one plan is counted multiple times for census counts. This produces an overstatement in the census when compared with true counts of people. Liabilities are, however, correctly calculated and apportioned among employers. This issue may affect inactive members to a greater extent than it affects others. IMRF is funded by both member and employer contributions. Members contribute at fixed rates determined by statute. Regular members contribute 4.5% of pay; SLEP members contribute 7.5%; ECO members contribute 7.5%. Participating employers make all additional contributions needed to provide benefits. Each employer contributes to a separate account within IMRF which, when combined with member contributions and investment income, will be sufficient to provide future benefits for its own employees. Employer contributions for each plan are computed each year in the actuarial valuation and consist of:

- **Normal Cost Contributions** for normal and early retirement benefits, separation benefits, permanent disability benefits, and annuity type death benefits. These contributions are the same for most employers (larger employers have the option of being individually rated).
- Contributions for lump sum death-in-service benefits, which are separately determined for each employer.
- Contributions for temporary disability benefits, which are 0.14% of payroll for each employer.
- Contributions for 13th Payments, which are 0.62% of covered payroll for each employer.
- Contributions for Early Retirement Incentive (ERI) unfunded liabilities which are separately determined for each employer.
- Contributions for other unfunded liabilities, which are separately determined for each employer. For employers with taxing authority, unfunded liabilities are being funded over a 27-year closed period (with a rolling period at 15 years). For non-taxing employers the unfunded liabilities are being funded over a 10-year rolling period. Unfunded liabilities associated with benefit changes for SLEP members (Public Act 94-712) are amortized over 22 years for most employers. The amortization policy is described on page D-12.

Employer contributions computed in this valuation compared with those computed in the prior valuation are shown below.

	Average Employer Contribution Rates Expressed as %'s of Active Member Pays						
	Regular	SLEP	ECO	Average/Total			
This Valuation	11.73%	22.71%	86.07%	12.34%			
Prior Valuation	11.69%	22.33%	70.37%	12.28%			

This year's valuation results were affected by:

- Changes in Actuarial Assumptions due to the Triennial Experience study done in the fourth quarter of 2014. Please see Experience Study report dated December 10, 2014.
- Unfavorable investment return in 2014.
- Continued recognition of Tier 2 benefits for new hires.
- ERI liabilities.
- Three employers are individually rated (DuPage County; Union School District 46 and Peoria County). Although these employers will receive separate valuation reports, member counts, assets, and liabilities for these employers are also included in this valuation report.

A full reconciliation of changes in contribution rates can be found in the Gain/Loss Analysis report. Based upon this year's valuation results, IMRF is 87.3% funded and the average/total employer rate is 12.34% of payroll.

Section A of this report describes this year's valuation results in depth.

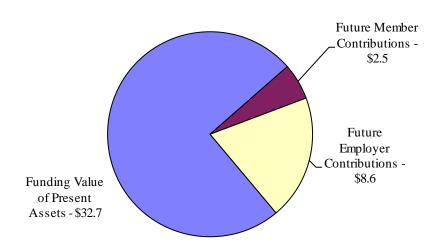
SECTION A

VALUATION RESULTS

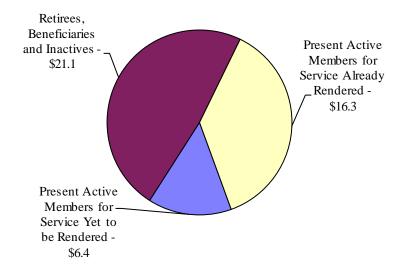
FINANCING \$43.8 BILLION WORTH OF BENEFIT PROMISES TO PRESENT MEMBERS, RETIREES AND BENEFICIARIES DECEMBER 31, 2014

(AMOUNTS IN \$BILLIONS)

Sources of Funds



IMRF Obligations



ACTUARIAL BALANCE SHEET DECEMBER 31, 2014

Funding Sources

	Regular	SLEP	ECO	Total
Present Valuation Assets				
Member Contributions	\$ 5,801,329,249	\$ 366,536,691	\$ 26,624,458	\$ 6,194,490,398
Employer Assets	11,209,145,774	570,031,021	(1,942,437)	11,777,234,358
Retired Life Assets	16,328,679,943	1,294,788,995	261,557,729	17,885,026,667
Market Value Adjustment	(2,960,734,423)	(197,935,865)	(24,738,380)	(3,183,408,668)
Death and Disability Reserves				26,865,782
Total Present Assets	\$30,378,420,543	\$2,033,420,842	\$261,501,370	\$32,700,208,537
Future Assets				
Member Contributions	\$ 2,338,904,658	\$ 193,166,569	\$ 6,257,134	\$ 2,538,328,361
Employer Contributions				
Normal Costs	3,524,958,361	302,896,740	13,760,425	3,841,615,526
Unfunded Liability	4,184,053,117	480,154,647	100,731,311	4,764,939,075
Total Employer	\$ 7,709,011,478	\$ 783,051,387	\$114,491,736	\$ 8,606,554,601
Total Future Assets	\$10,047,916,136	\$ 976,217,956	\$120,748,870	\$11,144,882,962
Total Funding Sources	\$40,426,336,679	\$3,009,638,798	\$382,250,240	\$43,845,091,499

Funding Uses

		5 0000		
Funds Needed for	Regular	SLEP	ECO	Total
Active Members	\$20,966,552,372	\$1,636,316,732	\$ 84,480,403	\$22,687,349,507
Inactive Members	3,131,104,364	78,533,071	36,212,108	3,245,849,543
Retirees and Beneficiaries	16,328,679,943	1,294,788,995	261,557,729	17,885,026,667
Death and Disability Benefits				26,865,782
Total Actuarial Present Value	\$40,426,336,679	\$3,009,638,798	\$382,250,240	\$43,845,091,499

DEVELOPMENT OF AVERAGE CONTRIBUTION RATES APPLICABLE TO CALENDAR YEAR 2016 (RESULTS AS OF DECEMBER 31, 2014)

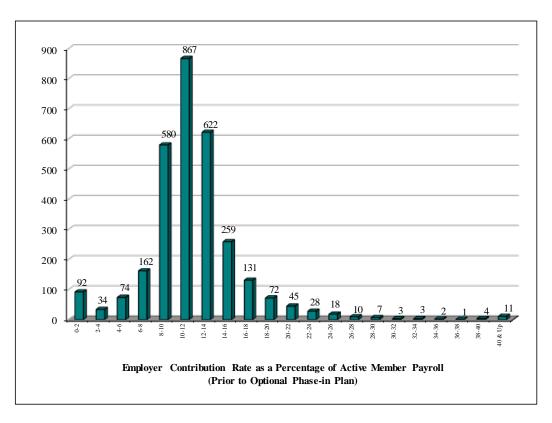
	% of	% of Active Member Pays					
	Regular	SLEP	ECO				
Tier 1 Normal Cost	7.29 %	12.44 %	16.50 %				
Tier 2 Normal Cost	4.41 %	8.47 %	13.49 %				
Average Employer Contributions for							
Normal Cost*							
Retirement	6.77 %	11.77 %	16.15 %				
\$3,000 Lump Sum Death Benefit	0.03 %	0.02 %	0.06 %				
Total & Permanent Disability Benefit	0.04 %	0.16 %	0.28 %				
Total Normal Cost	6.84 %	11.95 %	16.49 %				
Lump Sum Death-in-Service Benefits	0.15 %	0.15 %	0.15 %				
Temporary Disability	0.14 %	0.14 %	0.14 %				
13th Payments	0.62 %	0.62 %	0.62 %				
Unfunded (Overfunded) Liabilities (27/10 years)	3.76 %	7.88 %	68.67 %				
Early Retirement Incentive Liabilities	0.22 %	0.09 %	0.00 %				
SLEP Supplemental Liabilities	0.00 %	1.88 %	0.00 %				
Total Average Employer Rate	11.73 %	22.71 %	86.07 %				
Prior Year Averages	11.69 %	22.33 %	70.37 %				

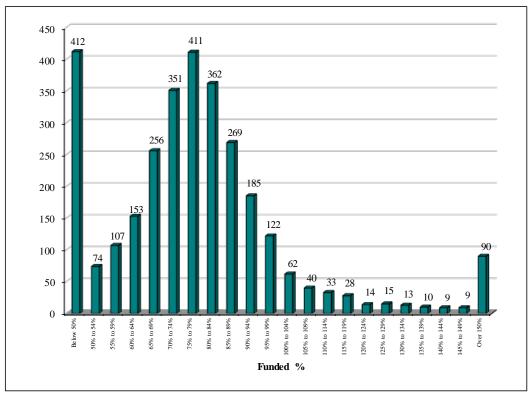
^{*} Average of Tier 1 and Tier 2 Normal Cost weighted on expected payroll.

Each participating employer pays a normal cost rate based on the weighted average of its Tier 1 and Tier 2 projected wages (some larger employers have the option of paying an individual normal cost rate) and the same rate for temporary disability benefits and 13th Payments. Rates for lump sum death-in-service benefits, unfunded (overfunded) liabilities, and early retirement incentive liabilities are separately determined for each employer, and can vary widely. Because of this, the average contribution rates tell only part of the story. Pages A-4 through A-7 show the distribution of computed employer contribution rates, funding percents, and rate changes based on the annual required contribution from the prior year among the 3,025 Regular plans, 206 SLEP plans and 67 ECO plans. IMRF staff reviews all of the computed rates and in some cases may make adjustments to those rates that are not reflected in this report.

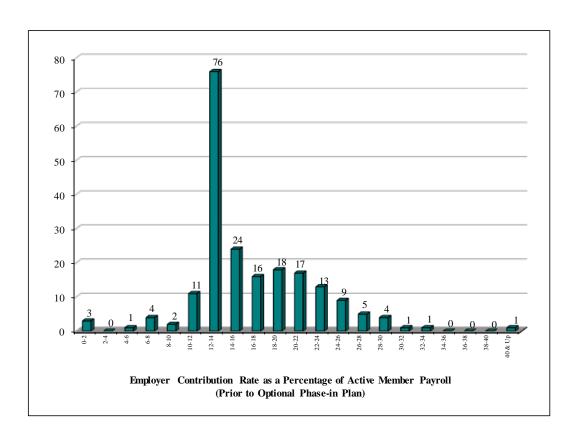
Employer contributions made during calendar year 2014 amounted to \$923 million. This compares with \$931 million in the previous year.

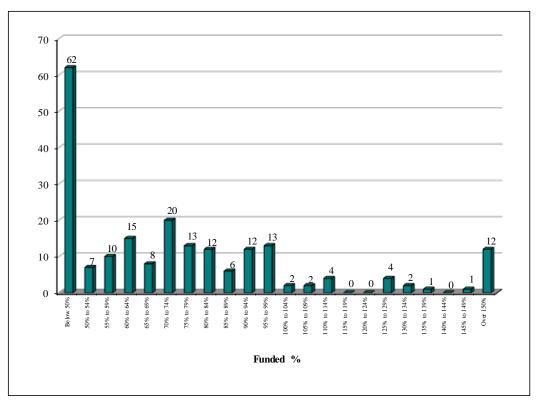
EMPLOYER CONTRIBUTION RATES AND FUNDED PERCENTS 3,025 REGULAR EMPLOYERS AT DECEMBER 31, 2014



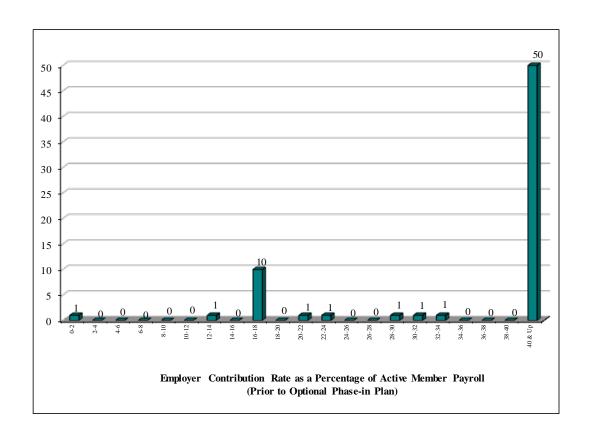


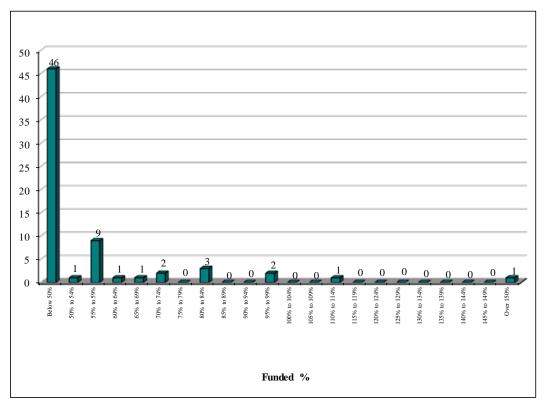
EMPLOYER CONTRIBUTION RATES AND FUNDED PERCENTS 206 SLEP EMPLOYERS AT DECEMBER 31, 2014



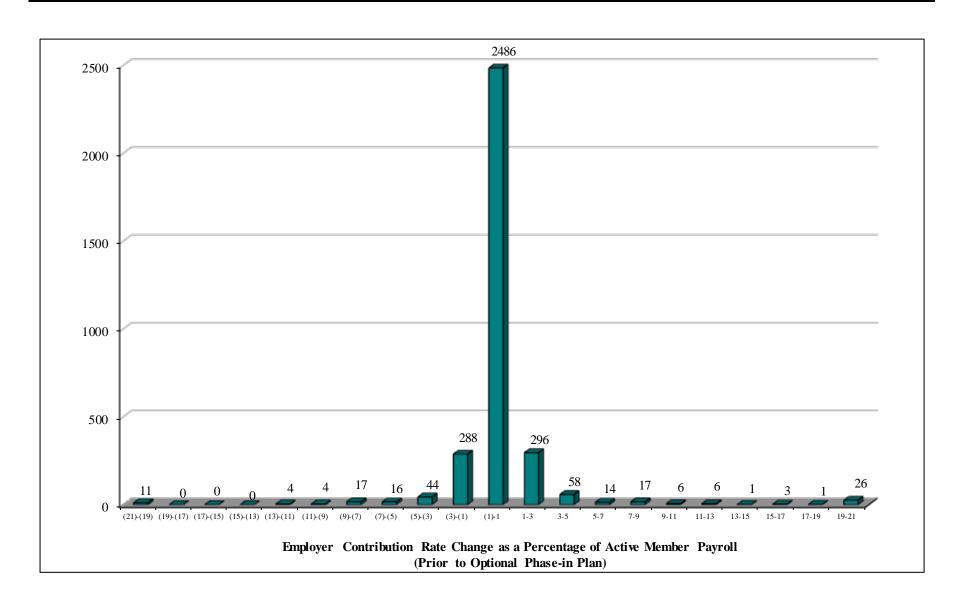


EMPLOYER CONTRIBUTION RATES AND FUNDED PERCENTS 67 ECO EMPLOYERS AT DECEMBER 31, 2014





EMPLOYER CONTRIBUTION RATE CHANGES - 2014 ACTUARIAL VALUATIONS 3,298 EMPLOYERS



HISTORICAL SUMMARY OF EMPLOYER RATES

			Eı	nployer Coi	ntribution R	late		
			Expressed as % of Active Payroll					
		Regular	Members	SLEP M	lembers	ECO M	lembers	
Rate Applies	Rate Computed		Average		Average		Average	
to Calendar	as of	Normal	Total	Normal	Total	Normal	Total	
Year	December 31	Cost	Rate	Cost	Rate	Cost	Rate	
1992	1990 ¹	8.24%	11.89%	10.31%	14.01%			
1993	1991 ^{1, 2}	7.04%	10.58%	8.49%	12.01%			
1994	1992	7.33%	10.77%	8.87%	11.82%			
1995	1993 ¹	7.22%	10.19%	9.50%	12.00%			
1996	1994	7.22%	9.98%	9.51%	11.97%			
1997	1995	7.27%	9.61%	9.32%	11.43%			
1998	1996 ¹	7.21%	9.64%	10.22%	13.94%			
1999	1997 ³	7.23%	9.03%	10.62%	14.65%	21.48%	36.14%	
2000	1998	7.17%	8.16%	10.42%	14.28%	23.39%	41.38%	
2001	1999 ¹	7.41%	6.64%	12.02%	14.86%	23.85%	42.58%	
2002	2000	7.62%	5.87%	11.94%	14.13%	18.05%	38.46%	
2003	2001	7.66%	6.22%	11.96%	14.04%	17.95%	40.37%	
2004	2002^{-1}	7.60%	7.82%	12.47%	16.29%	18.18%	44.90%	
2005	2003	7.61%	9.25%	12.48%	17.15%	18.07%	42.66%	
2006	2004	7.64%	10.04%	12.56%	18.25%	18.01%	44.90%	
2007	2005 1, 2	7.43%	9.72%	11.66%	18.42%	17.52%	41.30%	
2008	2006	7.42%	9.47%	11.63%	19.33%	16.96%	41.80%	
2009	2007	7.42%	9.27%	11.63%	18.65%	17.08%	42.77%	
2010	2008 1, 4	7.58%	11.89%	11.97%	21.63%	17.24%	43.57%	
2011	2009 4	7.58%	12.14%	11.97%	21.76%	17.20%	42.72%	
2012	2010 4	7.58%	12.42%	12.01%	22.48%	17.22%	47.15%	
2013	2011 ^{1, 2, 4}	7.77%	12.85%	12.74%	23.40%	17.63%	46.85%	
2014	2012 4	7.64%	12.58%	12.61%	23.20%	17.59%	74.52%	
2015	2013 4	7.51%	11.69%	12.42%	22.33%	17.73%	70.37%	
2016	2014 1,4	6.84%	11.73%	11.95%	22.71%	16.49%	86.07%	

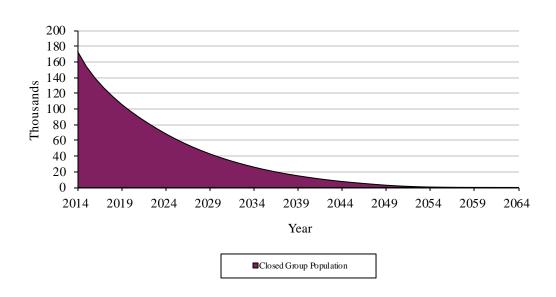
- 1 Assumption change.
- 2 Benefit change.
- 3 Changed to payroll weighted average method.
- 4 Before optional phase-in plan.

As shown above, the average employer contribution rates increased this year for regular, SLEP and ECO employers. Generally, small fluctuations from year to year should be expected for the average rate and for any large employer's rate. Small and very small employers will experience larger variations.

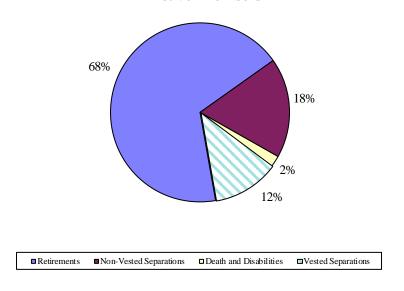
Most of the larger changes were for small employers (often employers covering only 1 or 2 employees), since the removal or addition of 1 employee can significantly impact the contribution rate. The actuary and IMRF staff review all of the large rate changes individually in order to determine the reasonableness of the change. In some cases, rates may be changed.

EXPECTED DEVELOPMENT OF PRESENT POPULATION DECEMBER 31, 2014

Closed Group Population Projection



Expected Terminations from Active Employment for Current Active Members



The charts above show the expected future development of the present population in simplified terms. The retirement system presently covers 173,579 active members. Eventually, 18% of the population is expected to terminate covered employment prior to retirement and forfeit eligibility for a monthly benefit. About 80% of the present population is expected to receive monthly retirement benefits either by retiring directly from active service, or by retiring from vested deferred status. Two percent of the present population is expected to become eligible for death-in-service or disability benefits. Within 8 years, over half of the covered membership is expected to consist of new hires.

UNFUNDED ACTUARIAL ACCRUED LIABILITIES

In a retirement system such as IMRF, where unfunded liabilities are being amortized as a level percent of active member payroll, unfunded liabilities are expected to rise in dollar amount for an extended period before finally beginning to decrease. This has to do with inflation and the related fact that the dollar is a yardstick whose length changes every year. The schedule below illustrates the development of the unfunded liability, based upon actuarial value of assets, during the year.

	Unfunded Liability I	Development During
	2014	2013
Unfunded (Overfunded) Liability January 1	\$4,273,532,925	\$5,111,434,314
Assumed Net (Payments) Credits	(253,703,224)	(304,110,359)
Assumed Interest	311,115,763	372,090,882
Expected Unfunded Liability December 31	4,330,945,464	5,179,414,837
Increase/(Decrease) Due to Experience Study	1,309,736,106	0
Increase/(Decrease) Due to Benefit Changes	0	0
Increase/(Decrease) Due to Data Changes	0	0
Loss/(Gain) Due to Investment Experience	(767,567,271)	(811,460,409)
Loss/(Gain) Due to Other Sources	(108,175,224)	(94,421,503)
Actual Unfunded Liability December 31	\$4,764,939,075	\$4,273,532,925

UNFUNDED ACTUARIAL ACCRUED LIABILITIES COMPARATIVE STATEMENT (AMOUNTS IN \$MILLIONS)

	(1)							
	Actuarial				(5)	(6)	(7)	(8)
	Accrued	(2)	(3)	(4)	Funde d	Liability/	Assets/	Unfunded/
Valuation	Liabilities	Valuation	Unfunde d	Valuation	Ratio	Payroll	Payroll	Payroll
Date	(AAL)	Assets	AAL	Payroll	(2)/(1)	(1)/(4)	(2)/(4)	(3)/(4)
1990*	\$ 6,234.6	\$ 4,468.8	\$1,765.8	\$2,303.5	71.7%	270.7%	194.0%	76.7%
1991*#	6,407.0	5,034.6	1,372.4	2,491.9	78.6%	257.1%	202.0%	55.1%
1992	6,954.5	5,615.6	1,338.9	2,634.4	80.7%	264.0%	213.2%	50.8%
1993*	7,509.8	6,396.3	1,113.4	2,709.3	85.2%	277.2%	236.1%	41.1%
1994	8,126.6	7,078.9	1,047.8	2,946.5	87.1%	275.8%	240.2%	35.6%
1995	8,823.7	8,034.0	789.7	3,095.9	91.1%	285.0%	259.5%	25.5%
1996*	9,778.6	9,076.3	702.3	3,084.1	92.8%	317.1%	294.3%	22.8%
1997	10,808.0	10,273.1	534.9	3,454.6	95.1%	312.9%	297.4%	15.5%
1998	11,860.9	11,636.5	224.4	3,696.0	98.1%	320.9%	314.8%	6.1%
1999*	13,005.0	13,520.2	(515.2)	3,952.1	104.0%	329.1%	342.1%	-
2000	14,153.1	15,169.4	(1,016.3)	4,184.7	107.2%	338.2%	362.5%	-
2001	15,318.5	16,305.0	(986.5)	4,503.1	106.4%	340.2%	362.1%	-
2002*	16,559.9	16,800.2	(240.3)	4,755.1	101.5%	348.3%	353.3%	-
2003	17,966.1	17,529.9	436.2	4,944.8	97.6%	363.3%	354.5%	8.8%
2004	19,424.7	18,316.0	1,108.7	5,161.1	94.3%	376.4%	354.9%	21.5%
2005 *#	20,815.1	19,698.4	1,116.7	5,374.6	94.6%	387.3%	366.5%	20.8%
2006	22,488.2	21,427.1	1,061.0	5,630.7	95.3%	399.4%	380.5%	18.8%
2007	24,221.5	23,274.4	947.2	5,931.4	96.1%	408.4%	392.4%	16.0%
2008 *	25,611.2	21,601.1	4,010.1	6,259.3	84.3%	409.2%	345.1%	64.1%
2009	27,345.1	22,754.8	4,590.3	6,461.7	83.2%	423.2%	352.1%	71.0%
2010	29,129.2	24,251.1	4,878.1	6,391.2	83.3%	455.8%	379.4%	76.3%
2011 *#	30,962.8	25,711.3	5,251.5	6,431.3	83.0%	481.4%	399.8%	81.7%
2012	32,603.2	27,491.8	5,111.4	6,496.1	84.3%	501.9%	423.2%	78.7%
2013	34,356.6	30,083.0	4,273.6	6,602.5	87.6%	520.4%	455.6%	64.7%
2014 *	37,465.1	32,700.2	4,764.9	6,732.5	87.3%	556.5%	485.7%	70.8%

^{*} Assumption change.

While no one or two numeric indices can fully describe the financial condition of a retirement system, trends in both the Funded Ratio (column 5) and the Unfunded/Payroll Ratio (column 8) provide useful information. Unfunded accrued liabilities represent plan debt, while active member payroll represents the plan's capacity to service the debt. In a retirement system that is following the discipline of level percent of payroll financing, the Funded Ratio should gradually move toward 100% and the Unfunded/Payroll ratio should gradually move toward 0%.

[#] Benefit change.

SHORT CONDITION TEST

If the contributions to IMRF are level in concept and soundly executed, the System will *pay all promised benefits when due -- the ultimate test of financial soundness*. Testing for level contribution rates is the *long-term test*.

A short condition test is one means of checking a system's progress under its funding program. In a short condition test, the plan's present assets (cash and investments) are compared with:

- 1) Member contributions on deposit;
- 2) The liabilities for future benefits to present retired lives;
- 3) The liabilities for service already rendered by active and inactive members.

In a system that has been following the discipline of level percent of payroll financing, the liabilities for member contributions on deposit (liability 1) and the liabilities for future benefits to present retired lives (liability 2) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active and inactive members (liability 3) will be partially covered by the remainder of present assets. The larger the funded portion of liability 3, the stronger the condition of the system.

Short Condition Test

	Aggregate Actuarial Liabilities For				Porti	on of Act	uarial
	(1)	(2)	(3)		Liabili	Liabilities Covered by	
			Non-Retired			Assets	
			Members				
Calendar	Non-Retired		(Employer	Actuarial			
Year	Contributions	Annuitants	Financed Portion)	Assets	(1)	(2)	(3)
1998	\$2,086,679,470	\$ 4,485,651,306	\$ 5,288,548,422	\$11,636,495,534	100%	100%	95.8%
1999*	2,259,446,274	4,915,459,683	5,830,117,336	13,520,192,111	100%	100%	108.8%
2000	2,473,646,891	5,284,275,174	6,395,133,709	15,169,369,271	100%	100%	115.9%
2001	2,708,833,984	5,613,708,283	6,995,975,308	16,305,022,254	100%	100%	114.1%
2002*	2,950,041,671	6,050,882,416	7,558,983,215	16,800,195,504	100%	100%	103.2%
2003	3,186,234,066	6,674,490,186	8,105,379,199	17,529,890,818	100%	100%	94.6%
2004	3,423,785,725	7,332,542,340	8,668,338,951	18,315,987,910	100%	100%	87.2%
2005*#	3,688,148,208	7,966,135,229	9,160,777,405	19,698,401,285	100%	100%	87.8%
2006	3,960,880,175	8,652,328,762	9,874,976,094	21,427,139,356	100%	100%	89.3%
2007	4,248,399,825	9,400,832,984	10,572,310,907	23,274,361,198	100%	100%	91.0%
2008*	4,573,736,116	10,025,599,295	11,011,863,938	21,601,053,512	100%	100%	63.6%
2009	4,893,022,745	10,903,323,478	11,548,766,993	22,754,803,784	100%	100%	60.3%
2010	5,153,902,881	12,121,959,266	11,853,366,092	24,251,136,889	100%	100%	58.8%
2011 *#	5,417,822,062	13,388,018,799	12,156,974,567	25,711,287,584	100%	100%	56.8%
2012	5,705,336,025	14,482,560,758	12,415,347,316	27,491,809,785	100%	100%	58.8%
2013	5,957,217,332	15,753,071,341	12,646,286,800	30,083,042,548	100%	100%	66.2%
2014 *	6,262,110,058	17,885,026,667	13,318,010,887	32,700,208,537	100%	100%	64.2%

^{*} Assumption change.

[#] Benefit change.

SHORT CONDITION TEST

Regular Members

	Aggregate Actuarial Liabilities For				Porti	on of Act	uarial
	(1)	(2)	(3)		Liabili	Liabilities Covered by	
			Non-Retired			Assets	
			Members				
Calendar	Non-Retired		(Employer	Actuarial			
Year	Contributions	Annuitants	Financed Portion)	Assets	(1)	(2)	(3)
2005*#	\$3,467,051,885	\$ 7,348,267,408	\$ 8,459,755,550	\$18,462,949,189	100%	100%	90.4%
2006	3,722,403,708	7,943,908,035	9,079,788,372	20,063,069,197	100%	100%	92.5%
2007	3,992,763,009	8,599,825,860	9,769,922,388	21,779,613,412	100%	100%	94.0%
2008*	4,297,097,330	9,168,217,695	10,187,007,579	20,191,630,667	100%	100%	66.0%
2009	4,594,830,636	9,971,780,724	10,698,214,439	21,250,929,876	100%	100%	62.5%
2010	4,841,653,264	11,047,821,308	11,007,557,254	22,628,324,412	100%	100%	61.2%
2011 *#	5,087,758,544	12,189,531,092	11,298,603,677	23,948,247,636	100%	100%	59.0%
2012	5,350,457,218	13,212,926,495	11,531,067,293	25,599,029,673	100%	100%	61.0%
2013	5,578,881,769	14,369,082,490	11,726,152,647	27,972,103,567	100%	100%	68.4%
2014 *	5,864,657,124	16,328,679,943	12,393,664,527	30,402,948,477	100%	100%	66.2%

^{*} Assumption change.

SLEP Members

	Aggregate Actuarial Liabilities For				Porti	on of Actu	uarial
	(1)	(2)	(3)		Liabili	Liabilities Covered by	
			Non-Retired			Assets	
			Members				
Calendar	Non-Retired		(Employer	Actuarial			
Year	Contributions	Annuitants	Financed Portion)	Assets	(1)	(2)	(3)
2005*#	\$200,612,275	\$ 524,514,703	\$591,855,568	\$1,106,145,236	100%	100%	64.4%
2006	215,431,613	601,939,738	673,264,887	1,216,287,901	100%	100%	59.3%
2007	230,360,204	682,656,029	671,880,227	1,330,462,724	100%	100%	62.1%
2008*	251,078,170	691,076,541	711,187,062	1,225,043,022	100%	100%	39.8%
2009	270,526,254	756,769,279	735,206,914	1,307,566,622	100%	100%	38.1%
2010	284,935,047	868,199,000	739,639,201	1,410,557,658	100%	100%	34.8%
2011 *#	301,264,894	976,023,299	754,994,446	1,533,422,771	100%	100%	33.9%
2012	326,676,260	1,025,411,748	792,652,347	1,644,518,055	100%	100%	36.9%
2013	350,386,522	1,151,948,743	836,915,042	1,870,636,530	100%	100%	44.0%
2014 *	370,537,841	1,294,788,995	850,193,605	2,035,365,794	100%	100%	43.5%

^{*} Assumption change.

[#] Benefit change.

[#] Benefit change.

SHORT CONDITION TEST

ECO Members

	Aggreg		Porti	on of Actu	ıarial		
	(1)	(2)	(3)		Liabili	Liabilities Covered by	
			Non-Retired			Assets	
			Members				
Calendar	Non-Retired		(Employer	Actuarial			
Year	Contributions	Annuitants	Financed Portion)	Assets	(1)	(2)	(3)
2005*#	\$20,484,049	\$ 93,353,118	\$109,166,286	\$129,306,860	100%	100%	14.2%
2006	23,044,854	106,480,989	121,922,835	147,782,258	100%	100%	15.0%
2007	25,276,522	118,351,095	130,508,292	164,285,062	100%	100%	15.8%
2008	25,560,616	166,305,059	113,669,297	184,379,823	100%	95%	0.0%
2009	27,665,855	174,773,475	115,345,640	196,307,286	100%	96%	0.0%
2010	27,314,570	205,938,958	106,169,637	212,254,819	100%	90%	0.0%
2011 *#	28,798,624	222,464,408	103,376,444	229,617,177	100%	90%	0.0%
2012	28,202,547	244,222,515	91,627,676	248,262,057	100%	90%	0.0%
2013	27,949,041	232,040,108	83,219,111	240,302,451	100%	92%	0.0%
2014 *	26,915,093	261,557,729	74,152,755	261,894,266	100%	90%	0.0%

^{*} Assumption change. # Benefit change.

SECTION B

SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA

This is a brief plan description of IMRF benefits. Additional conditions and restrictions may apply. A complete description is found in Article 7 of the Illinois Pension Code.

Participating Employers

All counties and school districts, plus cities and villages and incorporated towns with a population of 5,000 or more (except certain governmental entities specifically excluded by the Pension Code) are required to participate. Other local government units may elect to participate.

Membership

All appointed employees of a participating employer who are employed in a position normally requiring 600 hours (1,000 hours for certain employees hired after 1981) or more of work in a year are required to participate. Elected officials and hospital employees who satisfy requirements may also participate.

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 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. However, for teacher aides who meet certain criteria, service credit of less than one year may be considered in determining benefits under the Reciprocal Act.

Final Rate of Earnings (FRE)

Retirement and Survivor Annuities

Tier 1 Members: 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. 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 who join the plan after January 25, 2000, 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 Members: 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. For revised ECO members who join the plan after January 25, 2000, 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 which will increase annually beginning in 2012 by three percent or one-half of the increase of the Consumer Price Index, whichever is less. For SLEP members overtime compensation is excluded from pensionable earnings.

Death Benefits: The greater of the above amount or the average of earnings over the last 12 months of service.

Disability Benefits: The average of earnings over the last 12 months of service (for ECO members, annualized salary on last day of ECO participation).

Normal Retirement Pension Eligibility

Tier 1 Members:

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.

Tier 2 Members:

Normal retirement for an unreduced pension is:

- Age 67 with ten or more years of service or 35 or more years of service at age 62,
- Age 55 with ten or more years of SLEP service for members with SLEP service,
- Age 67 with eight or more years of service in the same elected county office for members with Revised ECO service.

Normal Retirement Pension Amount

A Regular IMRF pension is:

- 1-2/3 percent of the final rate of earnings for each of the first 15 years of service credit, plus
- 2 percent for each year of service credit in excess of 15 years.

The maximum pension at retirement cannot exceed 75 percent of the final rate of earnings.

A SLEP pension is:

• 2-1/2 percent of the final rate of earnings for each year of service.

The maximum pension at retirement cannot exceed 80 percent (75 percent for Tier 2) of the final rate of earnings.

An ECO pension is:

- 3 percent of the final rate of earnings for each of the first eight years of service, plus
- 4 percent for each year of service between eight and 12 years of service, plus
- 5 percent for years of service credit over 12.

The maximum pension at retirement cannot exceed 80 percent 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 at 7.5%.

A reversionary pension option is provided to members at retirement. This option permits the member to revert a portion of their pension to one other person upon their death. This election is irrevocable.

An IMRF pension is paid for life.

Early Retirement (not applicable to SLEP Tier 1 optional benefits or to ECO service)

Tier 1 Members: Regular members may retire as early as age 55 with a reduced pension. The reduction is the lesser of:

- one-fourth percent for each month the member is under age 60, or
- one-fourth percent for each month of service less than 35 years.

Tier 2 Members: Regular members may retire as early as age 62 with a reduced pension. The reduction is the lesser of:

- one-half percent for each month the member is under age 67, or
- one-half percent 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 one-half percent for each month the member is under age 55.

Early Retirement Incentive Program (ERI)

Eligibility and Amount: IMRF employers may offer an early retirement incentive (ERI) program to their employees who are over 50 (57 for Tier 2 regular and ECO members) years of age and who 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 once every five years by an employer after the liability for the previous ERI program is paid.

Member Cost: For each year of service credit purchased, members pay the current member contribution rate multiplied by the highest 12 consecutive months of salary (within ERI period).

Vesting

Tier 1 Members: 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: 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. Revised ECO members (those who join the ECO plan after January 25, 2000) are vested with ten or more years of ECO service credit in the same elected county position. Revised ECO members with at least 10 years of total service but less than 10 years of service in the same elected county office will receive a Regular pension.

Surviving Spouse Pension

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

For ECO members: A surviving spouse's monthly pension is 66-2/3 percent 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 spouse will receive (age 50 requirement does not apply):

- A monthly pension equal to 30 percent of the ECO member's salary at time of death, plus
- 10 percent 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 percent of the ECO member's salary at time of death, or
- A monthly pension equal to 66-2/3 percent of the pension the member had 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 three percent or one-half the increase in the Consumer Price Index, whichever is less.

Lump Sum Death-In-Service Benefit

Less than 1 year of service: Member contribution.

More than 1 year of service (or death in the line of duty): The sum of one times FRE (limited to pensionable earnings cap for Tier 2 members) and member contributions with interest.

These benefits are payable only if no surviving spouse pension is payable.

Lump Sum Death After Retirement Benefit

\$3,000. If there is no surviving spouse, any remainder of the deceased member's contributions and interest not paid out as a pension is also payable.

Children's Benefits

Regular and SLEP

Eligibility: Death of a member eligible to retire who has no surviving spouse, or death of a surviving spouse's beneficiary.

Amount: Equal to spouse's pension, divided equally among surviving children and payable to age 18.

ECO

Eligibility: Death of a member with minor children and no eligible spouse.

Amount: 20% of salary to each child, to a maximum of 50% of salary, payable to age 18.

If death occurs after termination of service, the total payment to the surviving spouse and children is limited to 75% of the member's pension.

Temporary Disability

Eligibility: Temporary disability for at least 30 days after one year of service and prior to age 70. Pre-existing conditions are excluded if service is under 5 years.

Amount: 50% of FRE less amounts payable from Social Security or Worker's Compensation.

Duration: Period equal to 1/2 credited service, not to exceed 30 months.

Total and Permanent Disability

Regular and SLEP

Eligibility: Payable after temporary disability period to members who are totally and permanently disabled and unable to engage in any gainful occupation.

Amount: 50% of FRE less amounts payable by Social Security.

Duration: To the later of (i) Social Security age, or (ii) age at disability plus 5 years.

ECO

Eligibility: Payable to members who are totally and permanently disabled from performing the duties of their office while in service as an elected county officer.

Amount: The greater of 50% of FRE or the alternate formula pension amount earned to date.

Duration: To the later of (i) Social Security age, or (ii) age at disability plus 5 years.

IMRF service is credited during the disability period, except that under the revised ECO plan, the service that will be credited will be Regular or SLEP as appropriate, but not ECO.

Post-Retirement Increases

Tier 1 Members: Members in all plans receive an annual 3% increase based upon the original amount of the annuity. The increase for the first year is pro-rated for the number of months the member was retired.

Tier 2 Members: Members in all plans receive an annual increase based upon the original amount of the annuity 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.

13th Payment

A lump sum payment is made to eligible retirees and surviving spouses on July 1st. The amount depends on funds available from a designated employer contribution of 0.62% of payroll. No specific 13th payment amount is promised to any individual.

Member Contributions

Regular Members: 4 1/2% of earnings (3-3/4% base plus 3/4% for survivor benefits).

SLEP Members: 7 1/2% of earnings (6-3/4% base plus 3/4% for survivor benefits).

ECO Members: 7 1/2% of earnings (6-3/4% base plus 3/4% for survivor benefits).

Converting past service credit: ECO members can convert past regular service by contributing 3% of earnings plus interest for each month of Regular service credit converted. ECO members can convert past SLEP service by contributing 0% to 3% (depending on the original SLEP contribution) of earnings plus interest for each month of SLEP service credit converted. SLEP members can convert past regular service by contributing 3% of earnings plus interest for each month of Regular service credit converted.

Voluntary Additional: Up to 10% of earnings.

Refunds: Non-vested members who stop working for an IMRF employer can receive a lump sum refund of their IMRF member contributions without interest. Vested members can receive a lump sum refund of their IMRF member contributions if they stop working for an IMRF employer prior to age 55 (62 for Tier 2 regular members, 50 for Tier 2 SLEP members). Vested members age 55 or older (62 for Tier 2 regular members, 50 for Tier 2 SLEP members) may receive separation refunds if the member rolls over the refund 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 (7.5% per year) were not paid as a refund or pension to either the member or his or her spouse, the beneficiary will receive any balance in the member's account.

Caps on Reportable Wages

Under Tier 2, a member's wages are capped. No contributions are payable on wages above the cap. The wage cap is also applied when IMRF calculates your benefits. The cap increases each year by the lesser of 3% or one-half of the increase in the Consumer Price Index (urban) for the preceding September. If the CPI is zero, the wage cap is not increased. A wage cap of \$111,572 was used in the December 31, 2014 valuation.

SUMMARY OF COVERED POPULATION DATA DECEMBER 31, 2014

Data on persons covered by IMRF were reported to the Actuary as follows:

				Average	
		Valuation	Pay/		
Member Status	No.	Payroll/Benefits	Benefits	Age	Service
Active Members					
Regular Tier 1	130,188	\$5,410,949,074	\$41,563	50.8	13.3
Regular Tier 2	38,958	1,022,688,767	26,251	38.5	1.6
SLEP Tier 1	3,459	250,615,570	72,453	43.6	15.0
SLEP Tier 2	735	34,793,812	47,339	33.1	2.5
ECO / ECO SLEP Tier 1	237	13,426,800	56,653	56.3	15.2
ECO / ECO SLEP Tier 2	237	26,853	13,427	58.3	4.0
ECO / ECO SLEP Tiel 2	2	20,633	13,427	36.3	4.0
Total Active	173,579	\$6,732,500,876	\$38,786	47.9	10.6
Inactive Members					
Regular Tier 1	155,450			47.4	5.5
Regular Tier 2	16,448			33.2	1.0
SLEP Tier 1	1,004			45.8	10.4
SLEP Tier 2	118			31.8	1.9
ECO / ECO SLEP Tier 1	198			56.1	13.5
ECO / ECO SLEP Tier 2	0			0.0	0.0
(Inactive and Active)	(35,277)				
Total Inactive	137,941			46.0	5.1
Retirees & Beneficiaries	160,522				
(Retired in multiple employers)	(48,533)				
Total Retired	111,989	\$1,602,356,316	\$14,308	72.2	
Total Population	423,509				
Prior Year Total	417,227				

There are a number of situations where members may be counted more than once. In particular, there are some members who are inactive with at least one employer and active with another employer. In order to avoid counting such individuals more than once, the inactive count is reduced by the number of such people as shown above. Other situations involving people who are inactive or retired with more than one employer can also lead to people being counted more than once in the totals above. Consequently, actual counts of people may be lower than the above counts would suggest.

Additional population statistics are presented on the following pages.

ACTIVE MEMBERS BY EMPLOYER TYPE DECEMBER 31, 2014 REGULAR, SLEP, ECO COMBINED

			Members		
	Rate		% of	Cumulative	
Type of Employer	Groups	Number	Total	Percent	Payroll
School Districts	855	83,422	48.4%	48.4%	\$ 2,386,447,480
Counties (Regular, SLEP,ECO)	269	30,318	17.5%	65.9%	1,410,084,550
Cities	304	18,371	10.6%	76.5%	1,000,541,392
Villages	468	14,284	8.2%	84.7%	838,144,399
Park Districts	201	7,739	4.5%	89.2%	309,844,105
Special Ed Districts	43	4,476	2.6%	91.8%	124,463,764
Townships	494	3,500	2.0%	93.8%	138,661,709
Library Districts	221	3,129	1.8%	95.6%	109,290,181
Sanitary Districts	38	932	0.5%	96.1%	60,130,898
Forest Preserve Districts	13	931	0.5%	96.6%	48,214,762
Towns	5	775	0.4%	97.0%	34,120,296
Consolidated Education Service Region	29	757	0.4%	97.4%	20,419,413
Intergovernmental Coop	53	661	0.4%	97.8%	44,147,166
Mass Transit District (Taxing Authority)	4	620	0.4%	98.2%	31,677,628
County Hospital Districts	3	619	0.4%	98.6%	28,228,706
Airport Authorities	12	287	0.2%	98.8%	16,623,524
Joint Spec Rec Assns	18	268	0.2%	99.0%	12,341,417
Misc. Taxing Authority	8	258	0.1%	99.1%	16,728,701
Mass Transit Instrumentality	3	246	0.1%	99.2%	9,218,068
Health Districts	4	232	0.1%	99.3%	9,608,705
Multi Co/Cons Health Dept.	3	205	0.1%	99.4%	6,970,219
Fire Protection Districts	59	197	0.1%	99.5%	12,105,166
Miscellaneous Instrumentality	16	186	0.1%	99.6%	11,755,069
Vocational System	40	146	0.1%	99.7%	5,236,928
Public Library System	2	138	0.1%	99.8%	5,950,939
County Conservation Districts	4	127	0.1%	99.9%	6,297,404
Public Housing Authority	8	110	0.1%	100.0%	4,457,270
	o 1	85	0.1%	100.0%	
Regional Planning Commission					5,880,071
Conservancy Districts	4	71	0.0%	100.0%	3,486,857
Educ Serv Centers	4	69 50	0.0%	100.0%	3,054,497
Water District	11	59 57	0.0%	100.0%	2,925,409
Public Housing Commission	6	57 57	0.0%	100.0%	2,519,413
County Road District	32	57	0.0%	100.0%	1,685,281
Special Ed Coop/Districts	13	56	0.0%	100.0%	4,029,418
Joint Education Projects	6	54	0.0%	100.0%	1,437,861
ROE Office	2	43	0.0%	100.0%	1,549,875
Water Supply/Sewr Comission	6	33	0.0%	100.0%	1,634,207
Mosquito Abatement District	7	29	0.0%	100.0%	1,786,975
Multi Twp Assessment Districts	14	16	0.0%	100.0%	320,145
Township Cemetary	12	11	0.0%	100.0%	246,136
Drainage District	2	5	0.0%	100.0%	234,872
Tuberculosis Sanitarium Districts	1	0	0.0%	100.0%	-
Employers with no Active Members		_		400	
or no Asset Information	576	0	0.0%	100.0%	
Totals	3,874	173,579	100.0%	100.0%	\$6,732,500,876

ACTIVE REGULAR MEMBERS BY ATTAINED AGE AND YEARS OF SERVICE DECEMBER 31, 2014

									Totals
Attained		Y	ears of Ser	vice to Val	uation Date	•	·		Valuation
Ages	0-7	8-9	10-14	15-19	20-24	25-29	30 & Up	No.	Payroll
15 - 19	279							279	\$ 3,570,524
20 - 24	4,996	48						5,044	105,950,033
25 - 29	9,438	1,802	41					11,281	331,249,351
30 - 34	6,755	4,578	1,381	58	1			12,773	470,150,765
35 - 39	5,874	3,998	3,173	1,179	32	2		14,258	570,259,102
40 - 44	6,282	4,426	3,054	2,498	810	78	7	17,155	673,895,507
45 - 49	6,522	5,572	4,021	2,910	1,836	982	69	21,912	861,594,108
50	1,209	1,274	1,063	714	407	375	94	5,136	204,123,483
51	1,209	1,310	1,149	756	411	444	132	5,411	214,532,206
52	1,198	1,273	1,201	874	510	455	219	5,730	232,907,734
53	1,150	1,269	1,220	979	494	457	325	5,894	238,467,372
54	1,119	1,256	1,265	1,048	568	434	410	6,100	250,834,146
55	1,016	1,169	1,195	1,080	604	435	465	5,964	247,753,386
56	1,000	1,136	1,204	1,015	585	384	426	5,750	229,011,773
57	897	1,070	1,144	1,091	623	416	458	5,699	233,196,455
58	920	1,025	1,095	1,114	695	408	471	5,728	231,364,297
59	822	873	958	1,020	656	397	409	5,135	207,672,951
60	775	839	853	916	642	415	361	4,801	194,398,386
61	689	743	825	871	579	364	303	4,374	173,292,558
62	586	744	709	740	548	340	285	3,952	157,697,803
63	504	600	648	586	439	302	245	3,324	132,869,661
64	447	518	530	484	361	256	217	2,813	109,403,002
65	314	458	431	378	311	197	181	2,270	88,576,523
66	295	369	318	257	214	158	112	1,723	62,169,697
67	214	303	250	194	138	86	82	1,267	45,367,648
68	250	294	196	182	111	96	65	1,194	40,938,576
69	144	196	149	105	60	56	64	774	26,140,657
70	119	130	126	89	40	40	47	591	18,291,378
Over 70	456	706	598	428	246	178	202	2,814	77,958,759
Totals	55,479	37,979	28,797	21,566	11,921	7,755	5,649	169,146	\$6,433,637,841

ACTIVE SLEP MEMBERS BY ATTAINED AGE AND YEARS OF SERVICE DECEMBER 31, 2014

							_		Totals
Attained		Ye	ars of Serv	vice to Valu	ation Date	:			Valuation
Ages	0-7	8-9	10-14	15-19	20-24	25-29	30 & Up	No.	Payroll
									_
20 - 24	74							74	\$ 2,897,948
25 - 29	271	83	1					355	18,061,709
30 - 34	181	371	109					661	39,855,797
35 - 39	105	201	277	79	4			666	42,996,559
40 - 44	73	115	202	314	84	1		789	55,917,750
45 - 49	34	80	120	184	236	104	2	760	57,714,267
50	8	11	20	18	30	49	2	138	11,171,270
51	1	11	12	22	25	27	2	100	7,500,883
52	5	6	11	19	21	26	3	91	7,258,077
53	2	3	16	14	17	21	4	77	5,791,163
54	6	5	12	18	9	9	6	65	4,831,738
55	7	6	8	10	14	15	3	63	4,816,781
56	6	4	8	11	12	13	6	60	4,527,033
57	6	4	6	3	7	12	3	41	3,306,332
58	4	3	6	6	4	14	4	41	3,111,547
59	4	5	12	11	6	8	2	48	3,285,363
60	2	7	3	5	4	2	4	27	1,821,421
61	3	6	5	7	3	3	4	31	2,259,008
62	3	6	8	6	4	4	3	34	2,632,404
63		2	5	5	1	2		15	1,156,893
64			4	2	1	3	2	12	1,018,208
65	2	2	3	4		1	3	15	1,074,345
66		2	2	2	4	3		13	972,928
67	2		1	2	1			6	471,338
68	1		2				1	4	452,648
69	1		1	1				3	197,120
70							1	1	56,836
Over 70		1	1		1		1	4	252,016
Totals	801	934	855	743	488	317	56	4,194	\$285,409,382

ACTIVE ECO REGULAR MEMBERS BY ATTAINED AGE AND YEARS OF SERVICE DECEMBER 31, 2014

									Totals
Attained		Yea	rs of Ser	vice to Va	duation E	ate			Valuation
Ages	0-7	8-9	10-14	15-19	20-24	25-29	30 & Up	No.	Payroll
25-29		1						1	\$ 11,017
30-34		1						1	128,958
35-39	3	4	3					10	888,500
40-44	2	4	1		2			9	633,512
45-49	1	6	7	4	5		1	24	1,567,693
50		2	3					5	263,981
51	1		1		1	3	2	8	458,509
52	3	4	5		2		1	15	1,030,081
53	2	2	2	1	1		2	10	370,722
54	3		1	1	1	1		7	455,469
55	1		2	1	1	1		6	333,778
56	2	4	1	4			1	12	899,747
57		1	1	6	1		3	12	602,170
58	1	3	5	5	1	1		16	718,295
59			3	4	1		1	9	600,283
60	2	3	3	2	1		4	15	945,530
61		1	1	2		1	1	6	178,185
62		3	2	1	4	1	1	12	802,892
63	1	4						5	112,450
64			4			1		5	291,882
65	2	1	4	2				9	373,228
66			1	3	1		1	6	267,072
67	1		2	1	1			5	221,824
68			1	1				2	22,419
69			1	1				2	22,711
70							1	1	88,125
Over 70	1	2	2	4	1	3	2	15	305,766
Totals	26	46	56	43	24	12	21	228	\$12,594,799

ACTIVE ECO SLEP MEMBERS BY ATTAINED AGE AND YEARS OF SERVICE DECEMBER 31, 2014

							_	7	Fotals
Attained _		Y	ears of Ser	vice to Va	luation Da	ate			Valuation
Ages	0-7	8-9	10-14	15-19	20-24	25-29	30 & Up	No.	Payroll
45-49	2	1	1					4	\$ 307,321
51					1			1	63,492
53			1					1	66,917
58			1					1	62,215
65						1	2	3	251,745
67					1			1	107,164
Totals	2	1	3		2	1	2	11	\$ 858,854

ALL ACTIVE MEMBERS BY YEARS OF SERVICE AND GENDER DECEMBER 31, 2014

Service	Acti	ive Member (Count	Active Mem	Active Member Pays		
Years	Males	Females	Total	Total	Average		
0	6,153	11,229	17,382	\$ 386,143,913	\$ 22,215		
1	5,030	8,332	13,362	359,599,927	26,912		
2	3,892	6,552	10,444	303,404,795	29,051		
3	3,252	5,135	8,387	258,997,776	30,881		
4	2,542	4,191	6,733	216,291,234	32,124		
5	2,517	4,259	6,776	217,497,835	32,098		
6	3,126	5,303	8,429	295,847,632	35,099		
7	3,035	5,752	8,787	312,239,615	35,534		
8	2,650	5,216	7,866	291,533,349	37,062		
Sub-Total	32,197	55,969	88,166	2,641,556,076	29,961		
9	2,543	4,559	7,102	275,202,746	38,750		
10	2,137	3,950	6,087	243,570,211	40,015		
11	2,045	3,444	5,489	225,265,965	41,040		
12	1,988	3,646	5,634	236,308,285	41,943		
13	2,146	4,259	6,405	268,265,205	41,884		
14	2,058	4,038	6,096	268,179,584	43,993		
15 & Up	19,789	28,811	48,600	2,574,152,804	52,966		
Totals	64,903	108,676	173,579	\$6,732,500,876	\$38,786		

INACTIVE REGULAR MEMBERS BY ATTAINED AGE AND YEARS OF SERVICE DECEMBER 31, 2014

Attained		Years of Service to Valuation Date									
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	No.			
15-19	66							66			
20-24	2,657	5						2,662			
25-29	12,396	217	1					12,614			
30-34	16,556	923	90	1				17,570			
35-39	14,530	1,100	312	26		1	10	15,979			
40-44	15,014	1,382	531	129	23	1	10	17,090			
45-49	15,521	1,881	861	272	108	31	32	18,706			
50	2,666	456	226	91	46	16	12	3,513			
51	3,008	509	292	141	57	22	11	4,040			
52	2,790	559	287	137	60	21	22	3,876			
53	2,882	583	367	151	68	24	38	4,113			
54	2,806	660	379	165	69	37	32	4,148			
55	2,821	553	359	119	75	38	34	3,999			
56	2,598	398	175	59	20	9	12	3,271			
57	2,349	346	129	49	17	11	19	2,920			
58	2,433	330	124	44	21	6	17	2,975			
59	2,100	327	110	29	16	7	14	2,603			
60	2,255	297	91	35	14	7	17	2,716			
61	1,898	240	63	26	9	3	9	2,248			
62	1,499	186	49	28	15	7	10	1,794			
63	1,706	173	42	14	12	5	13	1,965			
64	1,204	161	30	18	7	8	12	1,440			
65	1,087	105	24	8	10	10	11	1,255			
66	889	91	14	10	7	5	5	1,021			
67	831	71	16	7	2		2	929			
68	771	90	15	5	2	2	6	891			
69	485	45	5	7	1	1	3	547			
70	394	33	8	4			2	441			
Over 70	1,522	107	27	6	2	2	12	1,678			
Totals	117,734	11,828	4,627	1,581	661	274	365	137,070			

INACTIVE SLEP MEMBERS BY ATTAINED AGE AND YEARS OF SERVICE DECEMBER 31, 2014

Attained _		Years of Service to Valuation Date								
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	No.		
15-19										
20-24	6							6		
25-29	67	3						70		
30-34	81	24	4					109		
35-39	45	31	11					87		
40-44	64	27	10	4	4		1	110		
45-49	56	15	21	9	8	1	4	114		
50	7	5	6	5	3		1	27		
51	6	1	5		1		1	14		
52	8	4	6	1			1	20		
53	6	4	4	2	1		2	19		
54	8	3	5	2	1			19		
55	10	1	10	1	1	1	4	28		
56	9	2	1	3				15		
57	6	3		1				10		
58	4	2	1	1	1		1	10		
59	5		1				1	7		
60	6		1					7		
61	10	4		1	1			16		
62	7	1	1					9		
63	6	1	1				1	9		
64	4						2	6		
65	4					1	1	6		
66	2							2		
67										
68										
69	1							1		
70	2							2		
Over 70	2							2		
Totals	432	131	88	30	21	3	20	725		

INACTIVE ECO MEMBERS BY ATTAINED AGE AND YEARS OF SERVICE DECEMBER 31, 2014

Attained _	Years of Service to Valuation Date								
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	No.	
15-19									
20-24									
25-29									
30-34	1							1	
35-39		1						1	
40-44	4	7	1					12	
45-49	4	10	4	2	1	2		23	
50		1	1	1				3	
51	2	2	2	1	1			8	
52	1	3		1				5	
53		2	2		2	2		8	
54	1	6	1	1	1			10	
55	1	3	5		1			10	
56	1	2						3	
57	2			2				4	
58	4	2	1	1	1			9	
59	1	4	2					7	
60	3						1	4	
61		1	1	1	2			5	
62	2	1	1	2		1		7	
63			2		1			3	
64							1	1	
65	2				1		1	4	
66	1	3		1				5	
67	1	-	1			1		3	
68	1		_			_		1	
69	_	3						3	
70	1	-		1				2	
Over 70	2	2		-				4	
Totals	35	53	24	14	11	6	3	146	

RETIREES AND BENEFICIARIES DECEMBER 31, 2014

Annual Amounts by Form of Payment Level Payment Option Total Regular Type of Retirement No.* **Amount** No.* **Amount** No.* Amount Normal or Early Joint and 50% Survivor 847,270,488 265,074,192 104,191 82,333 21,858 \$ \$ 1,112,344,680 Joint and 66% Survivor 649 \$14,390,628 159 \$4,387,704 808 18,778,332 Straight Life 27,418 284,188,152 6,543 88,676,436 33,961 372,864,588 1,503,987,600 Total 110,400 1,145,849,268 28,560 358,138,332 138,960 Disability 413 3,662,664 0 413 3,662,664 Surviving Beneficiaries 15,061 83,873,364 823 7,109,472 15,884 90,982,836 Annuitization of Surviving Spouse and SLEP benefits 4,912 3,184,044 0 4,912 3,184,044 **Voluntary Contributions** 353 539,172 353 539,172

Of the 4,912 records listed as receiving "Annuitization of Surviving Spouse and SLEP benefits", 4,899 records are also in receipt of a separate retirement benefit.

Of the 353 records listed as receiving "Voluntary Contributions", 345 records are also in receipt of a separate retirement benefit.

Thirteenth check payment amounts are not included in the above figures.

In the above chart, "Regular" refers to all forms of payment other than the level payment option. It does not connote "Regular" as opposed to SLEP and ECO.

Grand Total 131,139 \$1,237,108,512 29,383 \$365,247,804 160,522 \$1,602,356,316

^{*} Number of records. There are 111,989 unique retirees.

RETIREES AND BENEFICIARIES BY ATTAINED AGE DECEMBER 31, 2014

A	ttain	e d		Number*		Annual	
	Ages	·	Males	Females	Total		Benefits
U	Inder	20	1	4	5	\$	11,424
20	-	24	7	6	13		23,196
25	-	29	9	15	24		70,584
30	-	34	14	24	38		144,900
35	_	39	15	20	35		168,480
40	-	44	22	36	58		303,444
45	-	49	37	92	129		810,384
50	-	54	538	390	928		17,765,940
55	-	59	5,033	7,374	12,407		174,287,724
60	-	64	9,783	17,392	27,175		331,302,408
65	-	69	11,035	23,579	34,614		372,732,468
70	-	74	8,602	20,663	29,265		274,573,884
75	-	79	6,480	15,463	21,943		188,787,888
80	-	84	4,632	11,149	15,781		125,104,992
85	-	89	3,355	7,636	10,991		75,930,888
90	-	94	1,405	4,072	5,477		33,011,556
9	5 & L	Jp	330	1,309	1,639		7,326,156
,	Total	S	51,298	109,224	160,522	\$1,6	02,356,316

^{*} Number of records. There are 111,989 unique retirees.

RETIREES AND BENEFICIARIES BY YEAR OF RETIREMENT DECEMBER 31, 2014

Ye	ear of			Numbe r*			Annual
Reti	re me n	ıt -	Males	Females	Total		Benefits
2	2014		4,087	8,002	12,089	\$	139,960,056
2	2013		4,164	8,077	12,241		134,292,216
2	2012		3,691	7,288	10,979		117,952,908
2	2011		3,558	6,676	10,234		122,335,968
2	2010		3,561	6,738	10,299		121,557,360
2	2009		3,040	5,244	8,284		96,740,184
2	2008		2,686	4,759	7,445		83,772,396
2	2007		2,596	5,395	7,991		80,475,468
2	2006		2,311	4,526	6,837		71,951,544
2	2005		2,281	4,553	6,834		67,752,888
2	2004		2,201	4,375	6,576		68,015,316
2	2003		2,260	4,162	6,422		63,443,928
2	2002		1,723	3,585	5,308		51,451,932
2	2001		1,487	3,620	5,107		40,577,952
	2000		1,225	2,943	4,168		37,052,820
1995	-	1999	6,258	14,873	21,131		184,271,376
1990	-	1994	2,555	7,764	10,319		76,656,876
1985	-	1989	1,174	4,308	5,482		33,890,196
1980	-	1984	359	1,712	2,071		8,700,912
1975	-	1979	72	510	582	1,320,684	
1970	-	1974	6	101	107	172,380	
Befo	ore 1970	0	3	13	16	10,956	
T	otal		51,298	109,224	160,522	\$1 ,	602,356,316

^{*} Number of records. There are 111,989 unique retirees.

DATA REPORTED FOR ACTUARIAL VALUATIONS COMPARATIVE SUMMARY

			A	ctive M	embers				
					Average				
Date	Total				Annual	Pay	Nu	mber	Ratio:
December 31	Count	Number	Age	Serv.	Pay	Increase	Inactive	Retired	Act/Ret.#
1990	228,964	121,234	43.3	7.3	\$19,000	5.3 %	57,016	50,714	2.40
1991	237,731	125,559	43.4	7.4	19,846	4.5 %	59,775	52,397	2.40
1992	242,730	126,557	43.7	7.7	20,816	4.9 %	61,964	54,209	2.30
1993	245,409	122,361	44.2	8.2	22,142	6.4 %	66,735	56,313	2.20
1994	265,456	133,803	43.8	7.8	22,021	(0.5)%	73,972	57,681	2.30
1995	262,232	136,617	43.8	8.2	22,661	2.9 %	65,914	59,701	2.29
1996	249,291	139,525	44.0	8.3	22,104	3.5 %*	48,274	61,492	2.27
1997	290,804	143,999	44.1	8.2	23,991	8.5 %	81,919	64,886	2.22
1998	303,869	148,610	44.3	8.2	24,871	3.7 %	88,173	67,086	2.22
1999	317,616	153,910	44.4	8.6	25,678	3.2 %	94,576	69,130	2.23
2000	330,313	157,836	44.6	8.2	26,514	3.4 %	102,082	70,395+	2.24
2001	343,842	163,886	44.9	8.3	27,477	3.9 %	108,338	71,618	2.29
2002	353,897	166,365	45.3	8.5	28,582	4.0 %	113,524	74,008	2.25
2003	361,010	166,439	45.7	8.8	29,709	3.9 %	118,093	76,478	2.18
2004	367,590	167,030	46.0	9.0	30,899	4.0 %	121,543	79,017	2.11
2005	377,251	169,867	46.3	9.1	31,640	2.4 %	125,761	81,623	2.08
2006	387,665	173,068	46.5	9.4	32,535	2.8 %	130,239	84,358	2.05
2007	398,659	176,495	46.7	9.5	33,607	3.3 %	134,687	87,477	2.02
2008	420,632	180,615	46.8	9.6	34,655	3.1 %	149,885	90,132	2.00
2009	412,435	180,643	47.1	9.8	35,771	3.2 %	138,530	93,262	1.94
2010	405,195	176,179	47.5	10.3	36,277	1.4 %	131,462	97,554	1.81
2011	409,415	175,233	47.7	10.4	36,701	1.2 %	132,282	101,900	1.72
2012	415,079	174,381	47.8	10.6	37,252	1.5 %	134,293	106,405	1.64
2013	417,227	173,481	47.9	10.7	38,059	2.2 %	136,749	106,997	1.62
2014	423,509	173,579	47.9	10.6	38,786	1.9 %	137,941	111,989	1.55

^{*} Changed method of recording earnings for 1996 valuation.

⁺ Restated subsequent to release of 2000 valuation.

[#] Number of unique retirees. There are 160,522 retiree records.

SECTION C FINANCIAL DATA

DEVELOPMENT OF FUNDING VALUE OF RETIREMENT SYSTEM ASSETS

Year Ended December 31	2013	2014	2015	2016	2017	2018
A. Funding Value Beginning of Year	\$27,491,809,785	\$30,083,042,548				
B. Market Value End of Year	33,203,014,332	34,833,147,358				
C. Market Value Beginning of Year	27,995,289,198	33,203,014,332				
D. Non-Investment/Administrative Net Cash Flow	(271,916,511)	(391,932,022)				
E. Investment Return						
El. Market Total: B-C-D	5,479,641,645	2,022,065,048				
E2. Assumed Rate of Return	7.50%	7.50%				
E3. Assumed Amount of Return	2,051,688,865	2,241,530,740		Scheduled	l	
E4. Return Subject to Phase-In: E1-E3	3,427,952,780	(219,465,692)				
F. Phased-In Recognition of Investment Return						
F1. Current Year: 0.20 x E4	685,590,556	(43,893,138)	Unknown	Unknown	Unknown	Unknown
F2. First Prior Year	125,869,853	685,590,556	(43,893,138)	Unknown	Unknown	Unknown
F3. Second Prior Year	-	125,869,853	685,590,556	(43,893,138)	Unknown	Unknown
F4. Third Prior Year	-	-	125,869,853	685,590,556	(43,893,138)	Unknown
F5. Fourth Prior Year	-	-	-	125,869,854	685,590,556	(43,893,140)
F6. Funding Corridor Adjustment	-	-				
F7. Total Scheduled Phase-in of gain/(loss)	811,460,409	767,567,271	767,567,271	767,567,272	641,697,418	(43,893,140)
G. Acceptable Phase-in of Investment Return						
G1. Projected Funding Value without Phase-in: A+D+E3	29,271,582,139	31,932,641,266				
G2. Limit on Phase-in: B-Gl	3,931,432,193	2,900,506,092				
G3. Acceptable Phase-in Amount	811,460,409	767,567,271				
H. Funding Value End of Year: A+D+E3+G3	\$30,083,042,548	\$32,700,208,537				
I. Difference Between Market and Funding Value	3,119,971,784	2,132,938,821	1,365,371,550	597,804,278	(43,893,140)	-
J. Recognized Rate of Return	10.5%	10.1%				
K. Market Rate of Return	19.7%	6.1%				
L. Ratio of Funding Value to Market Value	90.6%	93.9%				

The Funding Value of Assets recognizes assumed investment return (line E3) fully each year. Differences between actual and assumed investment return (line E4) are phased-in over a closed 5-year period subject to a 20% corridor. The acceptable phase-in amount (Item G3) is the minimum of Items F7 and G2, if G2 is positive. If G2 is negative, the acceptable phase-in amount is the greater of Items F7 and G2.

Illinois Municipal Retirement Fund

DEVELOPMENT OF MARKET VALUE ADJUSTMENT

In a single employer plan, the Market Value Adjustment would normally be the difference between the funding value of assets and the market value of assets. In IMRF, because of the need to allocate the Market Value Adjustment in an equitable manner among participating employers, certain extra steps are taken as shown below.

	Year Ended I	December 31
	2014	2013
Funding Value of End of Year	\$ 32,700,208,537	\$ 30,083,042,548
2. Amounts not used in rate calculations		
a. Suspended Annuity Reserve	30,220,144	28,178,806
b. Disability Benefit Reserve	11,184,427	13,476,275
c. Death Benefit Reserve	15,681,355	16,537,023
d. Supplemental Benefit Reserve	1,166,781	1,354,337
e. Cases removed from rate calculations*	29,718,127	25,443,821
f. Estimated pending reserve transfers	-	-
g. Total	87,970,834	84,990,262
3. Remaining amount to allocate: (1)-(2g)	32,612,237,703	29,998,052,286
4. Total reported negative reserves	(768,714)	(226,298)
5. Amount available to positive reserves: (3)-(4)	32,613,006,417	29,998,278,584
6. Total Market Value of reported positive reserves	35,796,415,085	33,184,365,356
7. Market Value Adjustment: (5)-(6)	\$ (3,183,408,668)	\$ (3,186,086,772)

^{*} Employers that are not included on the asset file submitted to the actuary. In general, these employers have no active members and no employer assets, but may have retired lives and/or inactive members.

The Market Value Adjustment is allocated among all employers that have a positive reserve balance (member plus employer plus retired life reserves), in proportion to each employer's reserve balance.

Even in years when the Funding Value of Assets equals the Market Value of Assets, a market value adjustment can be made due to the following reasons:

- Differences between the earnings and experience reserve and the investment loss reserve from the financial statements.
- Differences between employee contribution amounts in the financial statements versus data tapes.
- Differences between employer contribution amounts in the financial statements versus data tapes.

REPORTED MARKET VALUES

	Marke	et Value	Percentage of Total		
	2014	2013	2014	2013	
Investment Portfolio					
Fixed income	\$ 9,057,785,228	\$ 8,448,933,672	26.2%	25.6%	
Short term	33,946,485	172,068,164	0.1%	0.5%	
Foreign exchange contracts	3,555,087	2,177,750	0.0%	0.0%	
Stocks	21,905,520,371	21,416,906,402	63.4%	64.8%	
Bond funds	-	-	0.0%	0.0%	
Options	-	-	0.0%	0.0%	
Real estate	1,452,261,862	1,050,715,118	4.2%	3.2%	
Alternative investments	1,606,412,449	1,307,714,189	4.6%	4.0%	
Master trust reserve fund	601,211,778	758,648,826	1.7%	2.3%	
Cash	-	-	0.0%	0.0%	
Due from brokers	-	-	0.0%	0.0%	
Due (to) brokers	(99,471,035)	(185,380,521)	(0.3)%	(0.6)%	
Accrued investment income	50,986,604	54,430,964	0.1%	0.2%	
Total Invested Assets	\$34,612,208,829	\$33,026,214,564	100.0%	100.0%	
Receivables	234,765,246	185,227,682			
Cash	15,028,102	22,426,766			
Fixed Assets	16,643,651	11,857,913			
Total Market Value	\$34,878,645,828	\$33,245,726,925			
Liabilities					
Benefits & vouchers payable Securities Lending Payable	45,498,470	42,712,593			
Total Liabilities	45,498,470	42,712,593			
Nets Assets Available for					
Benefits	\$34,833,147,358	\$33,203,014,332			

Amounts on this page are preliminary year-end numbers and may not agree with final audited numbers reported by IMRF, but are shown for completeness.



SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS USED FOR IMRF ACTUARIAL VALUATIONS ASSUMPTIONS ADOPTED BY RETIREMENT BOARD AFTER CONSULTING WITH ACTUARY

Economic Assumptions

The investment return rate assumed in the valuations was 7.5% per year, compounded annually (net after administrative expenses).

The **Wage Inflation Rate** assumed in this valuation was 3.5% per year. The Wage Inflation Rate is defined to be the portion of total pay increases for an individual that are due to macroeconomic forces including productivity, price inflation, and labor market conditions. The wage inflation rate does not include pay changes related to individual merit and seniority effects.

No specific **Price Inflation** assumption is required to perform this valuation, since there are no benefits that are linked to price increases. However, a price inflation assumption on the order of 2.75% would be consistent with the other economic assumptions.

The assumed **real rate of return** over wage inflation is defined to be the portion of total investment return that is more than the assumed total wage growth rate. Considering other economic assumptions, the 7.5% investment return rate translates to an assumed real rate of return over wage inflation of 4.0%. The assumed real rate of return over price inflation would be higher – on the order of 4.75%, considering both an inflation assumption and an average expense provision.

The **Active Member Population** is assumed to remain constant. For purposes of financing the unfunded liabilities, total payroll is assumed to grow at the wage inflation rate -3.5% per year.

Pay increase assumptions for individual active members are shown for sample ages on pages D-8 and D-9. Part of the assumption for each age is for merit and/or seniority increase, and the other 3.5% recognizes wage inflation, including price inflation, productivity increases, and other macroeconomic forces.

The *number of active members* is assumed to continue at the present number.

Non-Economic Assumptions

Non-economic (decrement) assumptions include rates of mortality before and after retirement, rates of disability, rates of retirement, rates of other separation from employment and probabilities of an active member being married. The non-economic assumptions are based upon experience during the 2011-2013 period (please see report dated December 10, 2014), and were first used in the December 31, 2014 valuation. Decrement assumptions are shown for sample ages beginning on page D-3.

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS USED FOR IMRF ACTUARIAL VALUATIONS ASSUMPTIONS ADOPTED BY RETIREMENT BOARD AFTER CONSULTING WITH ACTUARY

Actuarial Valuation Method

An aggregate entry age actuarial cost method of valuation was used in determining most liabilities and normal cost. This means that an individual entry-age employer normal cost was determined for each benefit group (Regular Tier 1, Regular Tier 2, SLEP Tier 1, SLEP Tier 2, ECO Tier 1, ECO Tier 2) as a percent-of-payroll. The normal cost for each employer was calculated based on the aggregate Tier 1 and Tier 2 normal cost, weighted on the expected payroll of Tier 1 and Tier 2 members for the given employer. Larger employers have the option of an individual normal cost rate. The aggregate normal cost rate is then multiplied by the present value of future salary to determine the present value of future normal cost for each employer. The actuarial accrued liability is then calculated by subtracting the present value of future normal cost and present value of future employee contributions from the present value of future benefits.

Differences in the past between assumed experience and actual experience ("actuarial gains and losses") become part of actuarial accrued liabilities. Unfunded actuarial accrued liabilities are amortized to produce payments (principal & interest) which are level percent of payroll contributions.

Liabilities for lump sum death benefits and temporary disability benefits were determined using a term cost approach. Under this approach, the funding objective is to receive contributions each year that approximately equal the benefits being paid.

Employer contributions were assumed to be *paid in equal installments* throughout the year.

Present assets (cash & investments) at funding value are shown on page C-1.

Actuarial Valuation Method

The Funding Value of Assets (developed on page C-1) recognizes assumed investment return fully each year. Differences between actual and assumed investment income are phased-in over a closed 5-year period subject to a 20% corridor. The method also limits the adjustment to the expected actuarial return to the maximum amount of unrecognized gains or losses not yet reflected in the actuarial value of assets. In any year in which the actuarial value minus the market value of assets switches from a positive value to a negative value, or vice-versa, any prior gain/loss bases are eliminated and the smoothing mechanism restarts.

The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (MAAA).

ACTUARIAL ASSUMPTIONS DECEMBER 31, 2014

PROBABILITIES OF AGE & SERVICE RETIREMENT

Tier 1

	Reg	gular	Reg	gular	SI	EP	ECO-I	Regular	ECO-SLEP
	Reduce	ed Early	No	rmal	No	rmal	No	rmal	Normal
Age at					Service less	Service 32			Males &
Retirement	Males	Females	Males	Females	than 32 years	years or more	Males	Females	Females
50					23%	35%			23%
51					18%	35%			18%
52					13%	35%			13%
53					8%	35%			8%
54					23%	35%			23%
55	7.25%	5.75%	33%	27%	23%	35%	25%	25%	23%
56	7.25%	5.75%	25%	20%	18%	35%	25%	25%	18%
57	7.25%	5.75%	25%	20%	23%	35%	20%	20%	23%
58	7.25%	5.75%	25%	20%	33%	35%	20%	20%	33%
59	7.25%	5.75%	25%	20%	13%	35%	20%	20%	13%
60			12%	10%	8%	35%	5%	5%	8%
61			12%	10%	8%	35%	5%	5%	8%
62			22%	18%	23%	35%	10%	10%	23%
63			20%	18%	18%	35%	15%	15%	18%
64			20%	18%	18%	35%	15%	15%	18%
65			25%	25%	23%	35%	15%	15%	23%
66			30%	25%	23%	35%	13%	13%	23%
67			25%	25%	23%	35%	13%	13%	23%
68			20%	20%	23%	35%	13%	13%	23%
69			20%	20%	23%	35%	13%	13%	23%
70			20%	20%	100%	100%	13%	13%	100%
71-79			20%	20%	100%	100%	13%	13%	100%
80 & Over			100%	100%	100%	100%	100%	100%	100%

For terminated vested members, members were assumed to retire as follows:

- Regular Tier 1 members were assumed to retire at age 60 or attained age if later;
- Regular Tier 2 members were assumed to retire at age 67 or attained age if later;
- SLEP Tier 1 members with less than 20 years of service were assumed to retire at age 60;
- SLEP Tier 1 members with 20 or more years of service were assumed to retire at age 50;
- SLEP Tier 2 members with less than 20 years of service were assumed to retire at age 67;
- SLEP Tier 2 members with 20 or more years of service were assumed to retire at age 55;
- ECO Tier 1 members were assumed to retire at age 55 or attained age if later;
- ECO Tier 2 members were assumed to retire at age 62 or attained age if later.

ACTUARIAL ASSUMPTIONS DECEMBER 31, 2014 PROBABILITIES OF AGE & SERVICE RETIREMENT

Tier 2

				Reg	gular						SL	EP		
		M	ale			Fen	nale			Male			Female	
		Normal		Early		Normal		Early	No	rmal	Early	Noi	mal	Early
	Service	Service			Service	Service								
	Less	Between	Service		Less	Between	Service			Service 30		Service	Service	
	then 30	30 and 35			then 30	30 and 35	35 Years		Less than	Years or		Less than	30 Years	
Age	Years	Years	or More		Years	Years	or more		30 Years	More		30 Years	or More	
50											12%			12%
51											9%			9%
52											7%			7%
53											4%			4%
54											12%			12%
55									60%	80%		60%	80%	
56									18%	55%		18%	55%	
57									23%	55%		23%	55%	
58									33%	55%		33%	55%	
59									13%	55%		13%	55%	
60									8%	55%		8%	55%	
61									8%	55%		8%	55%	
62			75%	15%			75%	13%	23%	55%		23%	55%	
63			75%	15%			75%	13%	18%	55%		18%	55%	
64			75%	15%			75%	13%	18%	55%		18%	55%	
65			75%	15%			75%	13%	23%	55%		23%	55%	
66			75%	15%			75%	13%	23%	55%		23%	55%	
67	30%	50%	75%		25%	50%	75%		23%	55%		23%	55%	
68	30%	50%	75%		25%	50%	75%		23%	55%		23%	55%	
69	25%	50%	75%		20%	50%	75%		23%	55%		23%	55%	
70	20%	50%	75%		18%	50%	75%		100%	100%		100%	100%	
71	20%	50%	75%		18%	50%	75%		100%	100%		100%	100%	
72	20%	50%	75%		18%	50%	75%		100%	100%		100%	100%	
73	18%	50%	75%		18%	50%	75%		100%	100%		100%	100%	
74	18%	50%	75%		18%	50%	75%		100%	100%		100%	100%	
75	18%	50%	75%		18%	50%	75%		100%	100%		100%	100%	
76	18%	50%	75%		18%	50%	75%		100%	100%		100%	100%	
77	18%	50%	75%		18%	50%	75%		100%	100%		100%	100%	
78	18%	50%	75%		18%	50%	75%		100%	100%		100%	100%	
79	18%	50%	75%		18%	50%	75%		100%	100%		100%	100%	
80+	100%	100%	100%		100%	100%	100%		100%	100%		100%	100%	

ACTUARIAL ASSUMPTIONS DECEMBER 31, 2014 PROBABILITIES OF SEPARATION FROM ACTIVE MEMBER STATUS

Tier 1 and Tier 2

	% Separating Next Year									
	Reg	gular	EC	CO						
Service	Males	Females	Males	Females	SLEP	ECO-SLEP				
0	24.5%	29.0%	20.0%	15.0%	18.0%	18.0%				
1	19.0%	22.0%	12.0%	10.0%	10.0%	10.0%				
2	14.5%	17.0%	10.0%	8.0%	6.5%	6.5%				
3	12.0%	13.0%	9.0%	7.0%	6.0%	6.0%				
4	9.5%	11.0%	8.0%	6.0%	4.7%	4.7%				
5	8.0%	9.0%	7.0%	5.0%	3.5%	3.5%				
6	7.0%	7.5%	6.0%	4.0%	3.3%	3.3%				
7	6.5%	7.0%	5.5%	3.5%	N/A	N/A				
		•		•	7 or More	7 or More				
Age	8 or More Ye	ars of Service	8 or More Ye	ars of Service	Years of Service	Years of Service				
30	4.1%	6.1%	6.0%	3.2%	2.2%	2.2%				
35	3.2%	5.1%	6.0%	3.2%	1.7%	1.7%				
40	2.6%	3.9%	6.0%	3.2%	1.5%	1.5%				
45	2.2%	3.3%	6.0%	3.2%	1.5%	1.5%				
50	1.9%	2.8%	6.0%	3.2%	1.5%	1.5%				

ACTUARIAL ASSUMPTIONS DECEMBER 31, 2014

ACTIVE MEMBER PROBABILITIES OF DEATH AND DISABILITY

Tier 1 and Tier 2

	% Dying								
Sample	Regular	& ECO	SLEP & E	CO-SLEP					
Ages	Male	Female	Male	Female					
20	0.03%	0.01%	0.05%	0.01%					
25	0.04%	0.01%	0.06%	0.01%					
30	0.04%	0.02%	0.06%	0.02%					
35	0.05%	0.02%	0.06%	0.02%					
40	0.05%	0.03%	0.08%	0.03%					
45	0.08%	0.05%	0.12%	0.05%					
50	0.14%	0.09%	0.20%	0.09%					
55	0.24%	0.14%	0.34%	0.14%					
60	0.41%	0.20%	0.58%	0.20%					
65	0.71%	0.29%	1.01%	0.29%					
70	1.17%	0.49%	1.66%	0.49%					
75	1.95%	0.84%	2.77%	0.84%					
80	3.25%	1.44%	4.62%	1.44%					

For active members the mortality rates are based on the RP-2014 Employee Mortality Table for both males and females with 2-dimensional, fully generational improvements using the MP-2014 Mortality Improvement Scale. For Regular & ECO males 88% of the rates were used; for SLEP & ECO-SLEP males 125% of the rates were used; and for all females 82% of the rates were used.

				% I	Disabled			
Sample	Regular		EC	CO	SI	LEP	ECO-	SLEP
Ages	Male	Female	Male	Female	Male	Female	Male	Female
20	0.00%	0.00%	0.01%	0.01%	0.01%	0.02%	0.01%	0.01%
25	0.00%	0.00%	0.01%	0.01%	0.01%	0.03%	0.01%	0.01%
30	0.01%	0.00%	0.01%	0.01%	0.02%	0.05%	0.01%	0.01%
35	0.01%	0.01%	0.03%	0.02%	0.03%	0.07%	0.03%	0.02%
40	0.02%	0.01%	0.04%	0.03%	0.04%	0.10%	0.04%	0.03%
45	0.03%	0.02%	0.06%	0.04%	0.06%	0.14%	0.06%	0.04%
50	0.05%	0.03%	0.09%	0.06%	0.08%	0.21%	0.09%	0.06%
55	0.08%	0.04%	0.15%	0.10%	0.12%	0.29%	0.15%	0.10%
60	0.10%	0.07%	0.19%	0.17%	0.11%	0.27%	0.19%	0.17%
65	0.11%	0.08%	0.20%	0.20%	0.07%	0.18%	0.20%	0.20%
70	0.09%	0.07%	0.17%	0.17%	0.04%	0.11%	0.17%	0.17%
75	0.07%	0.05%	0.12%	0.12%	0.01%	0.03%	0.12%	0.12%
80	0.06%	0.04%	0.10%	0.10%	0.00%	0.00%	0.10%	0.10%

ACTUARIAL ASSUMPTIONS DECEMBER 31, 2014 RETIREE, BENEFICIARY, TERMINATED VESTED AND DISABLED LIFE MORTALITY

Tier 1 and Tier 2

	% Dying Next Year									
	Non-Disa	bled Lives	Disable	d Lives						
Sample Ages	Males	Females	Males	Females						
40	0.2182%	0.1136%	1.4586%	0.6262%						
45	0.3258%	0.1781%	1.9768%	0.8708%						
50	0.4543%	0.2731%	2.2796%	1.1523%						
55	0.6222%	0.3951%	2.4238%	1.4211%						
60	0.8822%	0.5534%	2.7755%	1.6401%						
65	1.4112%	0.8276%	3.5446%	1.9787%						
70	2.2884%	1.3191%	4.6898%	2.6638%						
75	3.7107%	2.1754%	6.3937%	3.8871%						
80	6.0777%	3.6182%	8.9791%	5.7867%						

	Life Expectancy Years for 2014				
	Non-Disabled Retired Lives		Disabled Lives		
Sample Ages	Males	Females	Males	Females	
40	42.9	48.3	30.5	39.2	
45	37.8	43.1	27.0	34.8	
50	32.9	38.0	23.9	30.7	
55	28.2	33.1	20.9	26.9	
60	23.6	28.3	17.8	23.2	
65	19.3	23.7	14.9	19.6	
70	15.4	19.3	12.1	16.0	
75	11.8	15.2	9.6	12.7	
80	8.7	11.6	7.3	9.9	

For non-disabled lives the mortality rates are IMRF specific mortality rates with 2-dimensional, fully generational improvements using the MP-2014 Mortality Improvement Scale (projected from 2014). These rates were developed from the RP-2014 Blue Collar Mortality Table with adjustments to match current IMRF experience. For disabled lives the mortality rates are IMRF specific mortality rates with 2-dimensional, fully generational improvements using the MP-2014 Mortality Improvement Scale. These rates were developed using the RP-2014 Disabled Mortality Table applying the same adjustments that were applied for non-disabled lives.

ACTUARIAL ASSUMPTIONS

DECEMBER 31, 2014 PAY INCREASES FOR REGULAR AND ECO ACTIVE MEMBERS

Tier 1 and Tier 2

% Increase in Pay Next Year							
				Increase For Those With			
	5 or More Years Service			Less Than 5 Years of Service			
	Merit &				Merit &		
Age	Longevity	Economic	Total	Service	Longevity	Economic	Total
25	2.0%	3.5%	5.5%	0	7.0%	3.5%	10.5%
30	1.7%	3.5%	5.2%	1	5.5%	3.5%	9.0%
35	1.2%	3.5%	4.7%	2	3.3%	3.5%	6.8%
40	0.9%	3.5%	4.4%	3	2.5%	3.5%	6.0%
45	0.7%	3.5%	4.2%	4	2.0%	3.5%	5.5%
50	0.5%	3.5%	4.0%				
55	0.4%	3.5%	3.9%				
60	0.3%	3.5%	3.8%				

For a person with 5 or more years of service, the assumed pay increase during the coming year is found in the 5 or more years of service total column. For a person with less than 5 years of service, the assumed pay increase during the coming year is found in the less than 5 years of service total column

ACTUARIAL ASSUMPTIONS DECEMBER 31, 2014 PAY INCREASES FOR SLEP AND ECO-SLEP ACTIVE MEMBERS

Tier 1 and Tier 2

% Increase in Pay Next Year						
Years of Service						
		Merit &	% Total			
Service	Economic	Longevity	Increase			
1	3.50%	11.00%	14.50%			
2	3.50%	8.50%	12.00%			
3	3.50%	4.00%	7.50%			
4	3.50%	3.50%	7.00%			
5	3.50%	3.00%	6.50%			
6	3.50%	2.50%	6.00%			
7	3.50%	2.00%	5.50%			
8	3.50%	1.50%	5.00%			
9	3.50%	1.25%	4.75%			
10	3.50%	1.00%	4.50%			
11	3.50%	0.75%	4.25%			
12	3.50%	0.75%	4.25%			
13	3.50%	0.50%	4.00%			
14	3.50%	0.50%	4.00%			
15	3.50%	0.50%	4.00%			
16	3.50%	0.50%	4.00%			
17	3.50%	0.50%	4.00%			
18	3.50%	0.50%	4.00%			
19	3.50%	0.50%	4.00%			
20	3.50%	0.50%	4.00%			
21	3.50%	0.50%	4.00%			
22	3.50%	0.50%	4.00%			
23	3.50%	0.50%	4.00%			
24	3.50%	0.50%	4.00%			
25	3.50%	0.50%	4.00%			
26	3.50%	0.50%	4.00%			
27	3.50%	0.50%	4.00%			
28	3.50%	0.50%	4.00%			
29	3.50%	0.50%	4.00%			
30	3.50%	0.50%	4.00%			

MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

Expenses: Assumed investment return is net of administrative and investment

expenses.

Marriage Assumption: 80% of male and 70% of female participants are assumed to be

married for purposes of death-in-service and death after retirement benefits. Male spouses are assumed to be three years older than

female spouses for active member valuation purposes.

Pay Increase Timing: Beginning of (Calendar) year. This is equivalent to assuming that

reported pays represent amounts paid to members during the year

ended on the valuation date.

Decrement Timing: Decrements of all types are assumed to occur mid-year.

Eligibility Testing: Eligibility for benefits is determined based upon the age nearest

birthday and service nearest whole year on the date the decrement is

assumed to occur.

Benefit Service: Exact fractional service on the decrement date is used to determine the

amount of benefit payable.

Decrement Relativity: Decrement rates are used directly from the experience study, without

adjustment for multiple decrement table effects.

Incidence of Contributions: Contributions are assumed to be received continuously throughout the

year based upon the computed percent of payroll shown in this report,

and the actual payroll payable at the time contributions are made.

The assumed normal form of benefit is a 50% joint and survivor benefit for Regular and SLEP Tier 1 members and 66 2/3% for Regular and SLEP Tier 2 members and ECO members. Factors for determining optional forms of payment are based on 120% of the

current mortality rates (50% unisex) and 7.5% interest.

Surviving Spouse Refunds: For those individuals who are not assumed to be married at retirement,

the surviving spouse contributions are assumed to be refunded.

SLEP Refunds: SLEP participants who are assumed to retire with insufficient service

to qualify for SLEP benefits are assumed to receive a refund of their

SLEP contributions.

SLEP Conversions: It was assumed that all active participants in the SLEP program will

convert all eligible service (up to 10 years). Additionally, it was assumed that these members would contribute the difference in both

member and employer rates for each year converted.

ECO Conversions: It is assumed that active participants in the ECO program will convert

all eligible service up to the point the maximum ECO benefit would be

achieved.

Final Rate of Earnings (FRE): The FRE is determined by projecting the current salary to retirement

and averaging the salary over the appropriate number of years. The current FRE is used if this produces a higher value. For Tier 2 members, FRE is capped at \$111,572 and increases by the lesser of 3%

and one-half of CPI.

Normal Form of Benefit:

MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

Refunds for Terminated Vested

Members: Members are assumed to elect annuities.

Other: Disability decrements operate during retirement eligibility.

Contingency Reserve: A contingency reserve of 0.25% of payroll is added to the normal cost to

account for various factors (changes in FRE, data adjustments, rehires,

service purchases, etc.)

Post–Retirement Increases: For Tier 2, pensions increase by the lesser of 3% or one-half of the

increase in the Consumer Price Index (urban) for the preceding September. If the CPI is zero, pension benefits are not increased. In the December 31, 2014 valuation annual pension increases were assumed to grow at an annual rate of 1.4%. Tier 1 increases are not related to CPI.

Wage Cap Growth: Under Tier 2, a member's wages are capped. The wage cap increases

each year by the lesser of 3% or one-half of the increase in the Consumer Price Index (urban) for the preceding September. If the CPI is zero, the wage cap is not increased. A wage cap of \$111,572 was used for Tier 2 members in the December 31, 2014 valuation. In the December 31, 2014 valuation, the wage cap was assumed to grow at an

annual rate of 1.4%.

FINANCING UNFUNDED ACCRUED LIABILITIES AND FULL FUNDING CREDITS DECEMBER 31, 2014 VALUATIONS

The following procedures were applied to financing liabilities in the valuation.

Financing Periods if employer is less than 120% funded on a market basis.

- 1. Instrumentalities: 10-year rolling period.
- 2. Early Retirement Incentive Plan liabilities: a period up to 10 years selected by the Employer upon adoption of ERI.
- 3. For taxing bodies (Regular, SLEP, and ECO rate Groups): 27-year closed period until remaining period reaches 15 years (then 15-year rolling period).

Financing Period if employer is over 120% funded on a market basis.

- 4. Irrespective of the size of the employer or the funding level, grant the employer an option to amortize overfunding over 120% over a 5-year period.
- 5. For employers with 50 or more employees, grant the employer an option to adopt a minimum contribution rate until the overfunding is reduced to 120%.
- 6. Irrespective of the size of the employer, surplus in a plan can be used to satisfy early retirement incentive costs so long as the reserve balance does not drop below 120%.

SLEP supplemental liabilities attributable to Public Act 94-712 were financed over 22 years for most employers (two employers were financed over 31 years). The mass production valuation applies rules 1 through 3. For rules 4 through 6, the period provided on the IMRF rate tape is used for valuation purposes and IMRF staff reviews each case individually to see if changes are needed to comply with Board policy. Employers also have the option to phase into a rate change that is more than 10% higher than the prior year (provided they pay the full cost for current service).

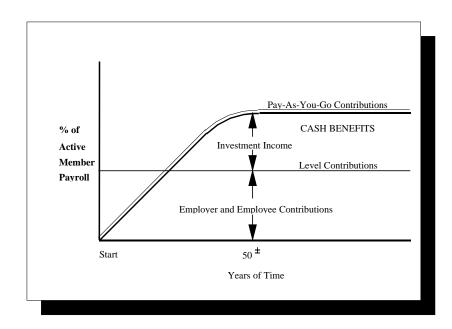
SELECTION OF ASSUMPTIONS USED IN ACTUARIAL VALUATIONS

Economic Assumptions

Investment return
Pay increases to individual employees:
the portion for economic changes
Active member group size and
total payroll growth

Demographic Assumptions

Actual ages at service retirement
Pay increases to individual members:
the portion for merit & seniority
Disability while actively employed
Separations before retirement
Mortality after retirement
Mortality before retirement



RELATIONSHIP BETWEEN THE BOARD AND THE ACTUARY

The actuary should have the primary responsibility for choosing the *demographic* assumptions used in the actuarial valuation, making use of specialized training and experience.

The actuary and other professionals can provide guidance concerning the choice of suitable economic assumptions, but the basis of the economic assumptions is expected market returns for various asset classes and the assumed rate of inflation (a quantity which defies accurate prediction). Given an assumed rate of future inflation, it is very important that this rate be applied in a consistent manner in deriving the assumed rate of investment return, the economic portion of the assumption on pay increases to individual employees, and the assumed rate of growth of active member payroll. Consistent application of assumptions is an area in which the actuary has specialized training.

A sound procedure is that the actuary suggests reasonable alternatives for economic assumptions, followed by discussion involving the actuary, the Board of Trustees, and other professionals, and the Board then makes a final choice from the various reasonable alternatives.

SECTION E FINANCIAL PRINCIPLES

FINANCIAL PRINCIPLES AND OPERATIONAL TECHNIQUES OF IMRF

Promises Made, and To Be Paid For: As each year is completed, IMRF in effect hands an "IOU" to each member then acquiring a year of service credit. The "IOU" says: "The Illinois Municipal Retirement Fund owes you one year's worth of retirement benefits, payments in cash commencing when you retire."

The related *key financial questions* are:

Which generation of taxpayers contributes the money to cover the IOU?

The present taxpayers, who receive the benefit of the member's present year of service? Or the future taxpayers, who happen to be in Illinois at the time the IOU becomes a cash demand, years and often decades later?

The law governing IMRF financing intends that this year's taxpayers contribute the money to cover the IOUs being handed out this year. With this financial objective, the employer contribution rate is expected to remain approximately level from generation to generation of taxpayers.

There are systems which have a design for deferring contributions to future taxpayers. Lured by a lower contribution rate now, they put aside the consequence that the contribution rate must then relentlessly grow to a level much higher than would be required if a level contribution pattern were followed.

An inevitable by-product of the level-cost design is the accumulation of reserve assets, for decades, and the income produced when the assets are invested. *Investment income* ultimately becomes *the 3rd* and *largest contributor* for benefits to members, and is interlocked with the contribution amounts required from members and employers.

Translated to actuarial terminology, this level-cost objective means that the contribution rates must total at least the following:

Normal Cost (the cost of members' service being rendered this year)

... plus ...

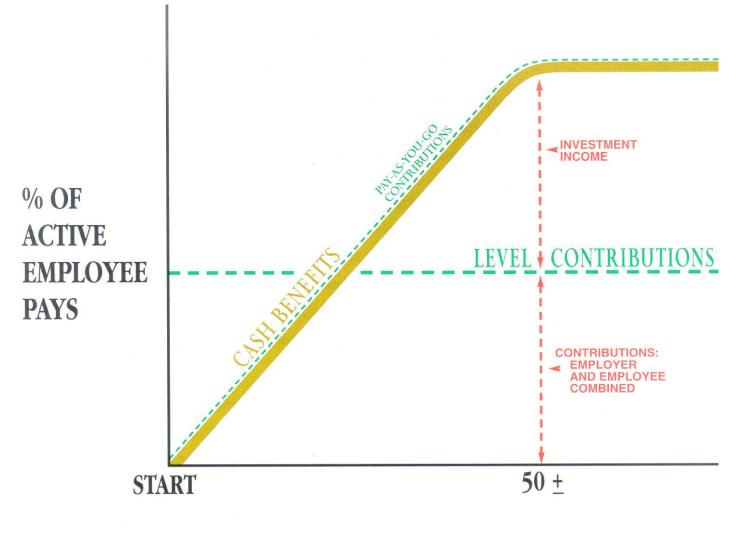
Interest at the assumed real rate of return on Unfunded Actuarial Accrued Liabilities (unfunded actuarial accrued liabilities are the difference between: accrued liabilities for service already rendered; and the accrued assets of IMRF).

Computing Contributions to Support Fund Benefits: From a given schedule of benefits and from member and asset data, the actuary calculates the contribution rates to support the benefits by means of an actuarial valuation and a funding method.

An actuarial valuation has a number of ingredients such as: the rate of investment return which plan assets will earn; the rates of withdrawal of active members who leave covered employment; the rates of mortality; the rates of disability; the rates of pay increases; and the assumed age or ages at actual retirement. These rates cannot be known today. Consequently, in an actuarial valuation, assumptions must be made as to what the above rates will be for the next year and for decades in the future. The assumptions are established by the Board of Trustees after receiving the advice of the actuary.

Reconciling Differences Between Assumed Experience and Actual Experience: Once actual experience has occurred and has been observed, it will not coincide exactly with assumed experience, regardless of the skill of the actuary and the many calculations made. The future cannot be predicted.

IMRF copes with these continually changing differences by having annual actuarial valuations. Each actuarial valuation is a complete recalculation of assumed future experience, taking into account all past differences between assumed and actual experience. The result is *continuing adjustments in financial position*. Once every three years, an Experience Study is conducted to fully review differences between actual and assumed experience and recommend changes to our assumed experience, where appropriate.



YEARS OF TIME

CASH BENEFITS LINE. This relentlessly increasing line is the fundamental reality of retirement plan financing. It happens each time a new benefit is added for future retirements (and happens regardless of the design for contributing for benefits).

LEVEL CONTRIBUTION LINE. Determining the level contribution line requires detailed assumptions concerning a variety of experiences in future decades, including:

Economic Risk Areas

Rates of investment return

Rates of pay increase

Changes in active member group size

Non-Economic Risk Areas

Ages at actual retirement

Rates of mortality

Rates of withdrawal of active members (turnover)

Rates of disability

THE ACTUARIAL VALUATION PROCESS

The financing diagram on the previous page shows the relationship between the two fundamentally different philosophies of paying for retirement benefits: the method where contributions match cash benefit payments (or barely exceed cash benefit payments, as in the Federal Social Security program) which is thus an increasing contribution method; and, the level contribution method which attempts to equalize contributions between the generations.

The actuarial valuation is the mathematical process by which the level contribution rate is determined. The activity constituting the valuation may be summarized as follows:

A. *Census Data*, including:

Retired lives now receiving benefits

Former members with vested benefits not yet payable

Active members

B. + Asset data (cash & investments)

C. + **Benefit provisions** that establish eligibility and amounts of payments to members

D. + Assumptions concerning future experience in various risk areas

E. + *The funding method* for employer contributions (the long-term, planned pattern for employer contributions)

F. + Mathematically combining the assumptions, the funding method, and the data

G. = Determination of:

Plan Financial position and/or

New Employer Contribution Rates

GLOSSARY

Actuarial Accrued Liability - The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost (employer and employee). Sometimes referred to as "accrued liability" or "past service liability."

Accrued Service - The service credited under the plan which was rendered before the date of the actuarial valuation.

Accumulated Benefit Obligation - The actuarial present value of vested and non-vested benefits based on service to date and past and current salary levels.

Actuarial Assumptions - Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

Actuarial Cost Method - A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future plan benefits" between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

Actuarial Equivalent - A single amount or series of amounts of equal value to another single amount or series of amounts, computed on the basis of the rate(s) of interest and mortality tables used by the plan.

Actuarial Present Value - The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Actuarial Present Value of Credited Projected Benefits or Pension Benefit Obligation - The present value of future benefits based on service to date and the effect of projected salary increases.

Actuary - A person who is trained in the applications of probability and compound interest to problems in business and finance that involve payment of money in the future, contingent upon the occurrence of future events. Most actuaries in the United States are Members of the American Academy of Actuaries. The Society of Actuaries is an international research, education and membership organization for actuaries in the life and health insurance, employee benefits, and pension fields. It administers a series of examinations leading initially to Associateship and the designation A.S.A. and ultimately to Fellowship with the designation F.S.A.

Amortization - Paying off an interest-bearing liability by means of periodic payments, as opposed to paying it off with a lump sum payment.

Experience Gain (Loss) - A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used.

ERI - Early Retirement Incentive Plan.

Funded Percent - A measure of the ratio of the funding value of assets to the actuarial accrued liability.

Normal Cost - The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

Plan Termination Liability - The actuarial present value of future plan benefits based on the assumption that there will be no further accruals for future service and salary. The termination liability will generally be less than the liabilities computed on a "going concern" basis and is not normally determined in a routine actuarial valuation.

Reserve Account - An account used to indicate that funds have been set aside for a specific purpose and are not generally available for other uses.

Unfunded Actuarial Accrued Liability - The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded accrued liability."

Valuation Assets - The value of current plan assets recognized for valuation purposes.



April 8, 2015

Mr. Mark Nannini Chief Financial Officer Illinois Municipal Retirement Fund 2211 York Road - Suite 500 Oak Brook, Illinois 60523-2374

Re: December 31, 2014 Actuarial Valuation

Dear Mark:

Enclosed are 5 copies of the report. We have also included an unbound master copy in case you need to make additional copies.

We look forward to reviewing the results of this year's valuations at the Board meeting.

Sincerely,

Mark Buis, FSA, EA, MAAA

MB:sc Enclosures