GRS Gabriel Roeder Smith & Company
Consultants & Actuaries

ILLINOIS MUNICIPAL RETIREMENT FUND

ANNUAL ACTUARIAL VALUATION REPORT

DECEMBER 31, 2012

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April 10, 2013

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

Ladies and Gentlemen:

The results of the **December 31, 2012 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 2014 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. The undersigned 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

Brian B. Murphy, FSA, EA, MAAA

Mark Buis

Mark Buis, FSA, EA, MAAA

BBM/MB:mrb

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, 2012, encompasses 3,285 active plans and serves 415,079 active, inactive 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 0.11% 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 29-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 24 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	12.58%	23.20%	74.52%	13.19%
Prior Valuation	12.85%	23.40%	46.85%	13.37%

This year's valuation results were affected by:

- Favorable investment return in 2012.
- Continued recognition of Tier 2 benefits for new hires.
- Closure of System for ECO plan members.
- 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.

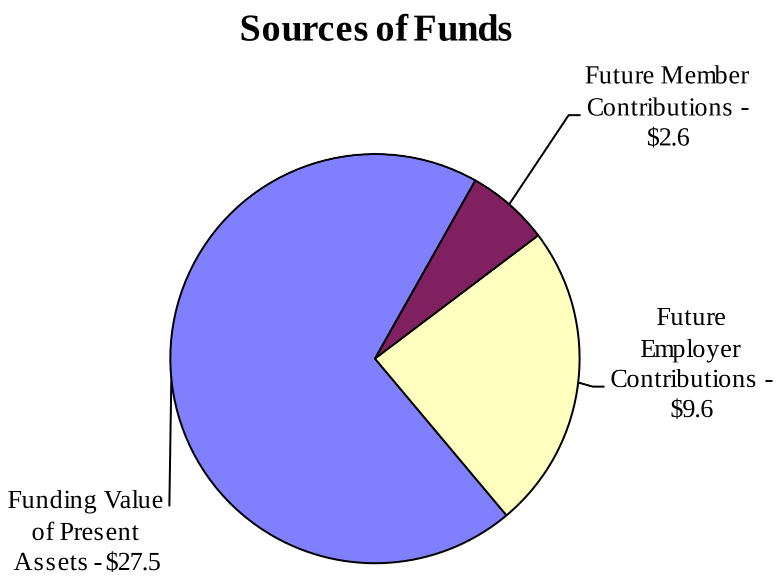
The effect of the 2008 market value decline has been completely recognized in the Funding Value of Assets. Based upon this year's valuation results, IMRF is 84.3% funded and the average/total employer rate is 13.19% of payroll. The computed rate for ECO members increased significantly from the prior valuation due to the closing of the system to new hires for ECO plan benefits. This is due to a change in the amortization method from level percentage of payroll to level dollar amounts which is a method that is appropriate for closed plans. However, the payroll will also be lower, so the difference in dollar contributions will be smaller than it appears from looking at the contributions rates by themselves.

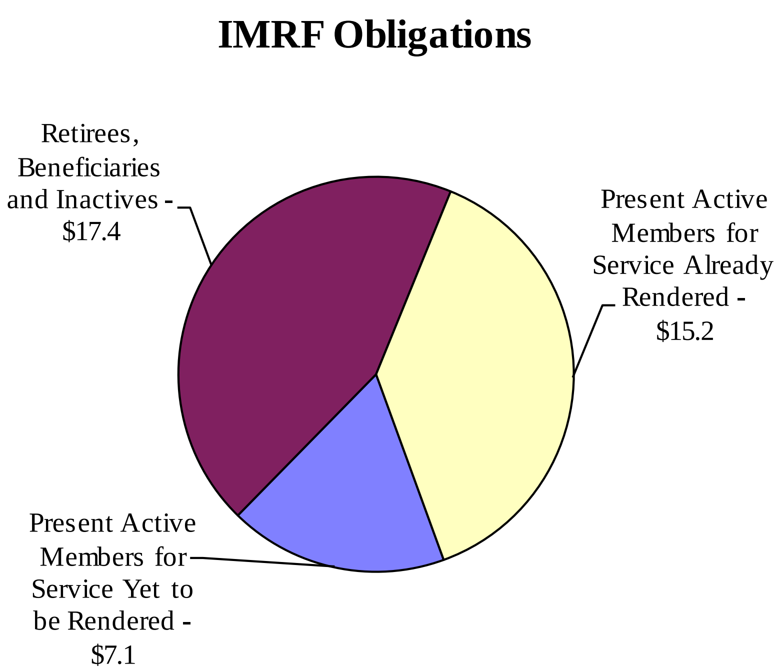
Section A of this report describes this year's valuation results in depth.

SECTION A

VALUATION RESULTS

FINANCING $39.7 BILLION WORTH OF BENEFIT PROMISES TO PRESENT MEMBERS, RETIREES AND BENEFICIARIES DECEMBER 31, 2012 (AMOUNTS IN $BILLIONS)





ACTUARIAL BALANCE SHEET
DECEMBER 31, 2012

Funding Sources

	Regular	SLEP	ECO	Total
Present Valuation Assets				
Member Contributions	$ 5,393,416,961	$ 329,299,200	$ 28,428,990	$ 5,751,145,151
Employer Assets	7,486,104,754	321,083,546	(20,247,782)	7,786,940,518
Retired Life Assets	13,212,926,495	1,025,411,748	244,222,515	14,482,560,758
Market Value Adjustment	(519,304,204)	(33,285,340)	(4,620,126)	(557,209,670)
Death and Disability Reserves				28,373,028
Total Present Assets	$25,573,144,006	$1,642,509,154	$247,783,597	$27,491,809,785
Future Assets				
Member Contributions	2,438,377,464	191,714,023	8,057,831	2,638,149,318
Employer Contributions				
Normal Costs	4,109,590,737	320,332,624	18,900,115	4,448,823,476
Unfunded Liability	4,495,421,320	500,222,300	115,790,681	5,111,434,301
Total Employer	8,605,012,057	820,554,924	134,690,796	9,560,257,777
Total Future Assets	11,043,389,521	1,012,268,947	142,748,627	12,198,407,095
Total Funding Sources	**$36,616,533,527**	**$2,654,778,101**	**$390,532,224**	**$39,690,216,880**

Funding Uses

Funds Needed for	**Regular**	**SLEP**	**ECO**	**Total**
Active Members	$20,548,904,121	$1,555,743,141	$109,537,384	$22,214,184,646
Inactive Members	2,854,702,911	73,623,212	36,772,325	2,965,098,448
Retirees and Beneficiaries	13,212,926,495	1,025,411,748	244,222,515	14,482,560,758
Death and Disability Benefits				28,373,028
Total Actuarial Present Value	**$36,616,533,527**	**$2,654,778,101**	**$390,532,224**	**$39,690,216,880**

Development of Average Contribution Rates Applicable to Calendar Year 2014 (Results as of December 31, 2012)

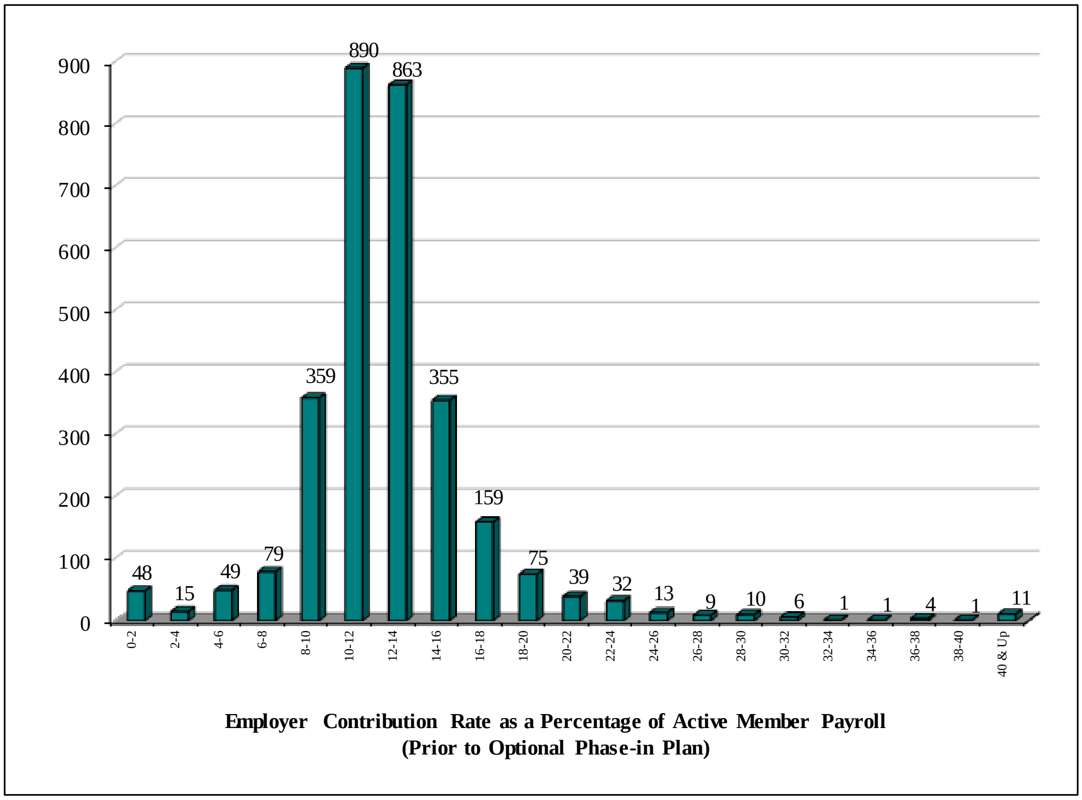
	% of Active Member Pays		
	Regular	SLEP	ECO
Tier 1 Normal Cost	7.89 %	12.84 %	17.60 %
Tier 2 Normal Cost	4.67 %	8.88 %	13.57 %
Average Employer Contributions for			
Normal Cost*			
Retirement	7.52 %	12.38 %	17.19 %
$3,000 Lump Sum Death Benefit	0.04 %	0.01 %	0.06 %
Total & Permanent Disability Benefit	0.08 %	0.22 %	0.34 %
Total Normal Cost	7.64 %	12.61 %	17.59 %
Lump Sum Death-in-Service Benefits	0.17 %	0.18 %	0.18 %
Temporary Disability	0.11 %	0.11 %	0.11 %
13th Payments	0.62 %	0.62 %	0.62 %
Unfunded (Overfunded) Liabilities (29/10 years)	3.75 %	7.82 %	56.02 %
Early Retirement Incentive Liabilities	0.29 %	0.11 %	0.00 %
SLEP Supplemental Liabilities	0.00 %	1.75 %	0.00 %
Total Average Employer Rate	**12.58 %**	**23.20 %**	**74.52 %**
Prior Year Averages	12.85 %	23.40 %	46.85 %

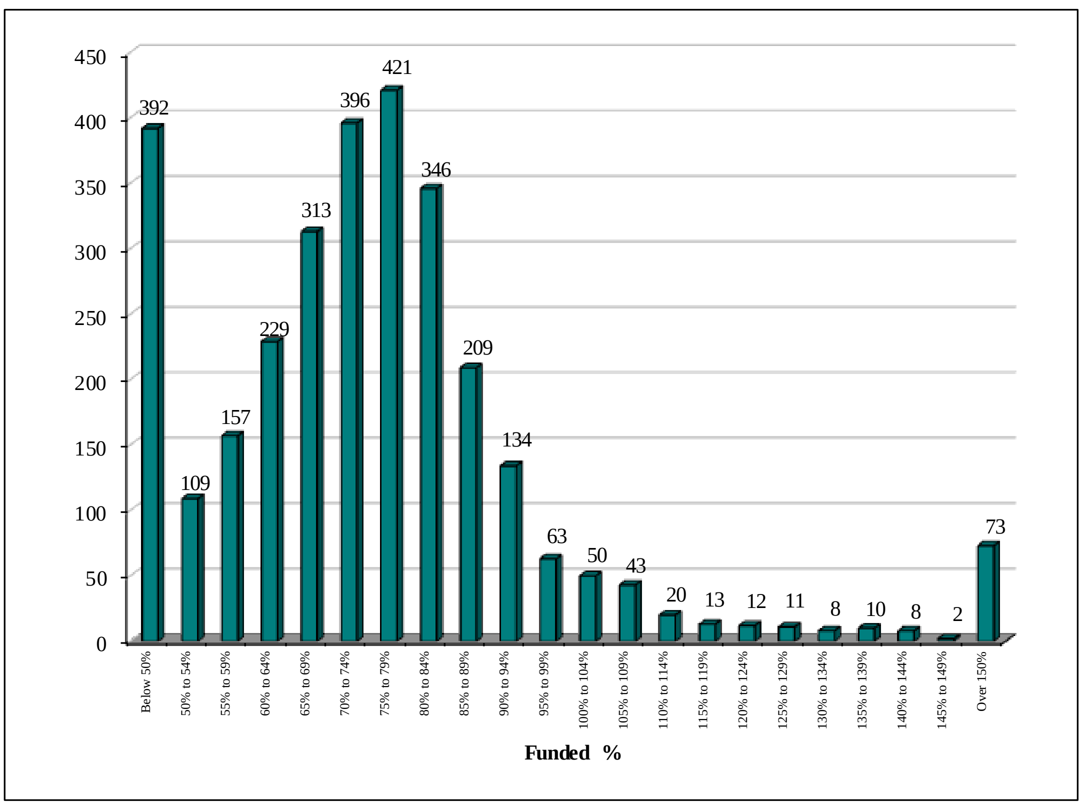
* *Average of Tier 1 and Tier 2 Normal Cost weighted on expected payroll.*

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 3,019 Regular plans, 199 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.

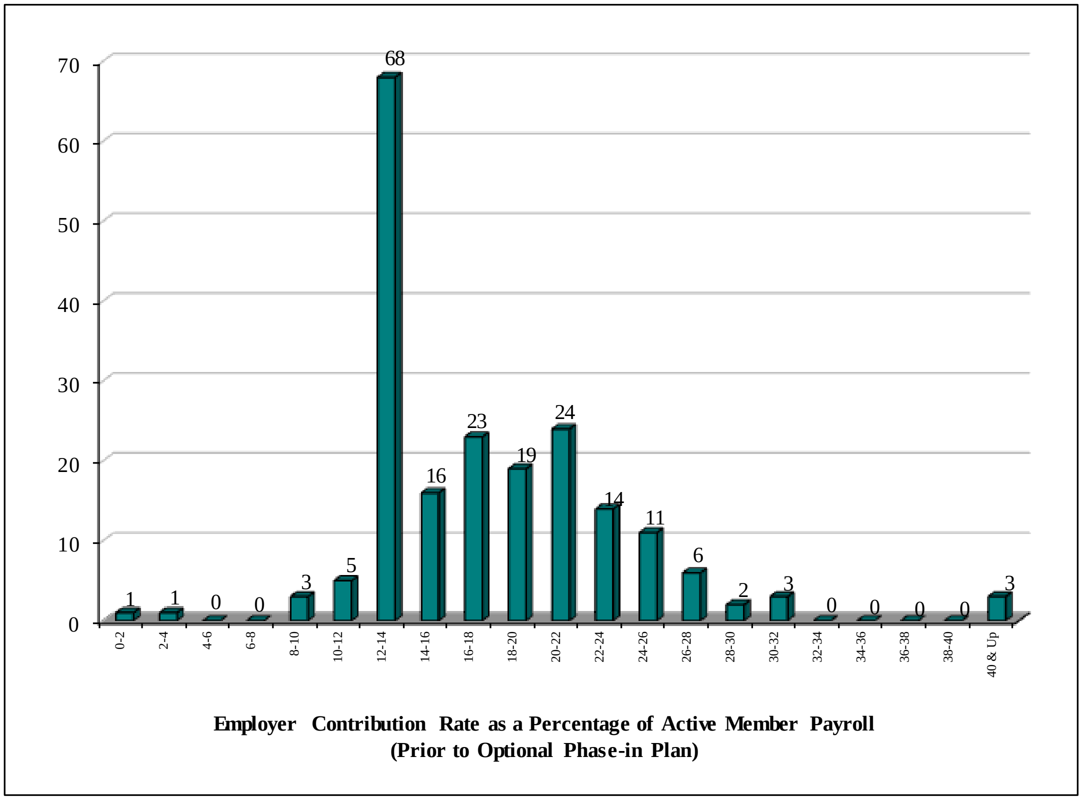
Employer contributions made during calendar year 2012 amounted to $883 million. This compares with $801 million in the previous year.

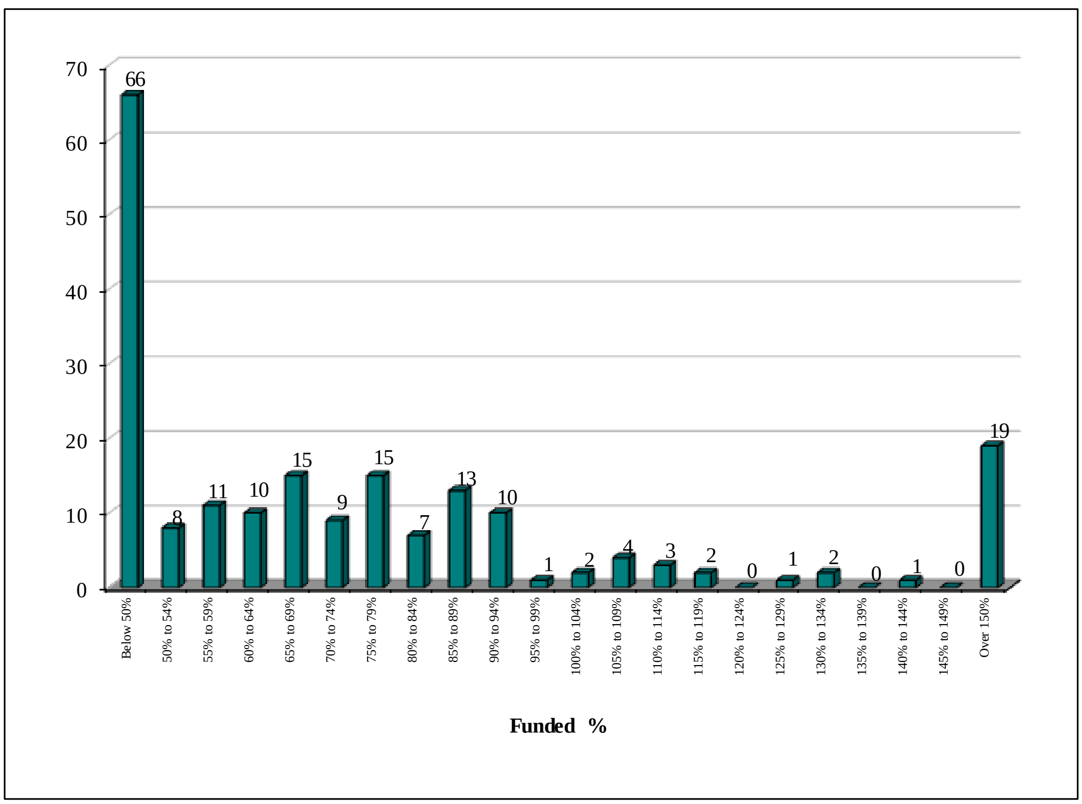
EMPLOYER CONTRIBUTION RATES AND FUNDED PERCENTS
3,019 REGULAR EMPLOYERS AT DECEMBER 31, 2012



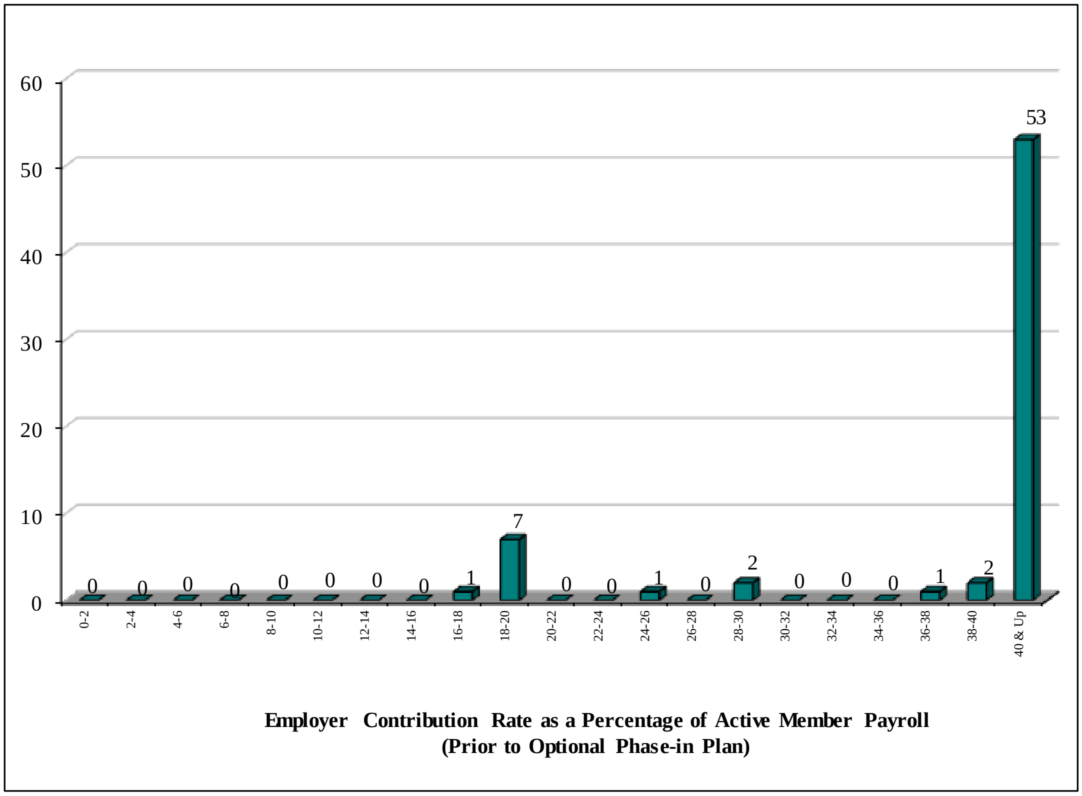


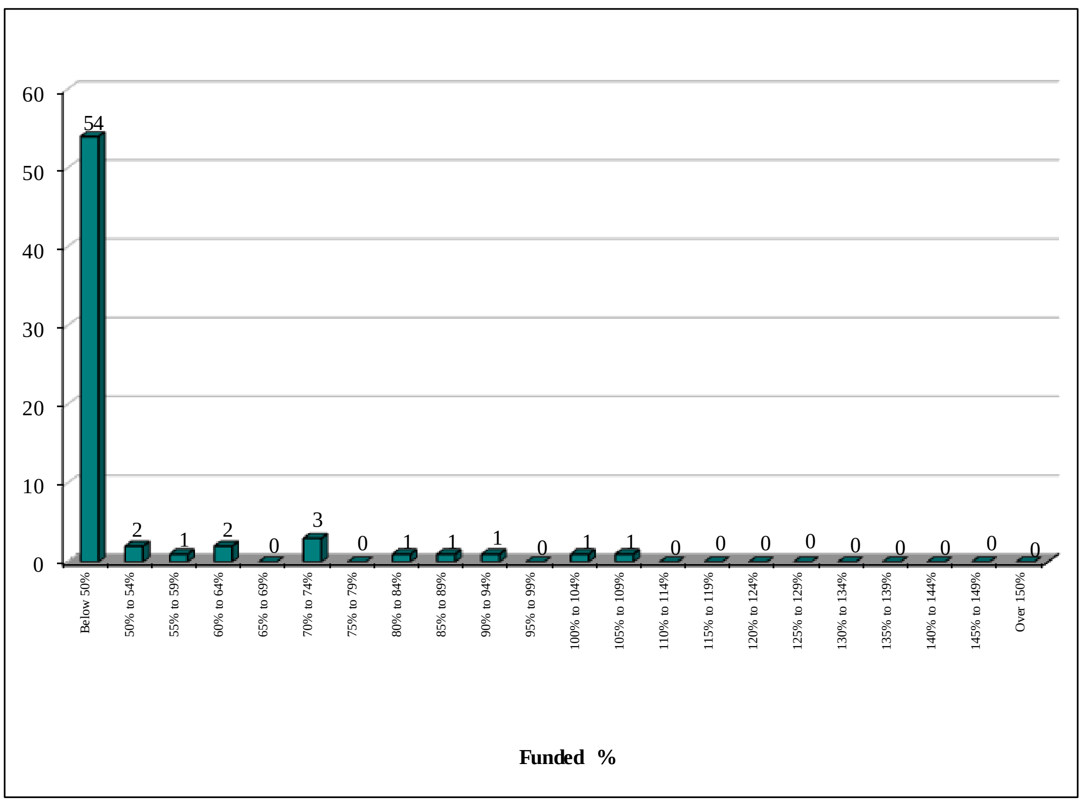
EMPLOYER CONTRIBUTION RATES AND FUNDED PERCENTS
199 SLEP EMPLOYERS AT DECEMBER 31, 2012



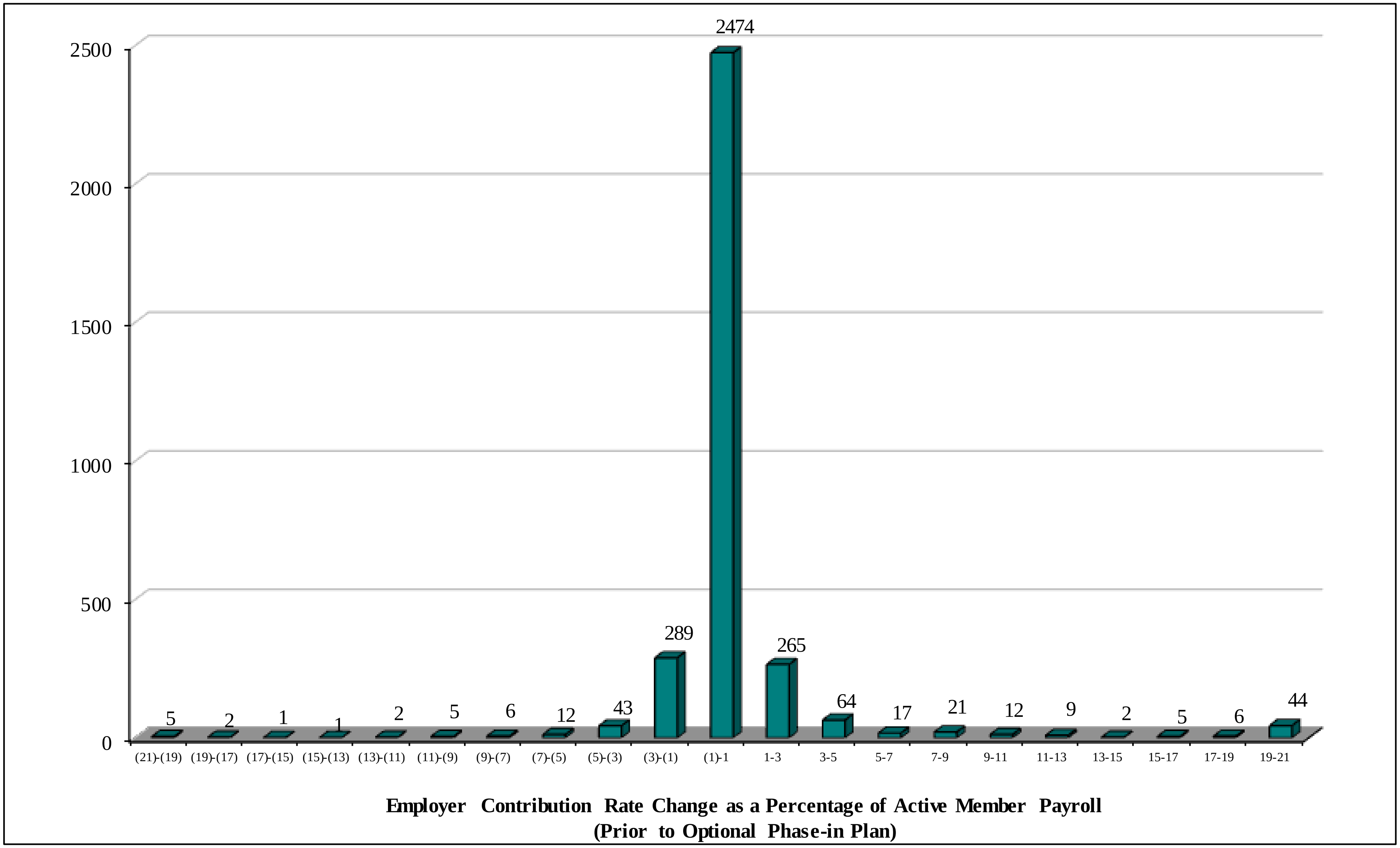


EMPLOYER CONTRIBUTION RATES AND FUNDED PERCENTS
67 ECO EMPLOYERS AT DECEMBER 31, 2012





EMPLOYER CONTRIBUTION RATE CHANGES - 2012 ACTUARIAL VALUATIONS
3,285 EMPLOYERS



HISTORICAL SUMMARY OF EMPLOYER RATES

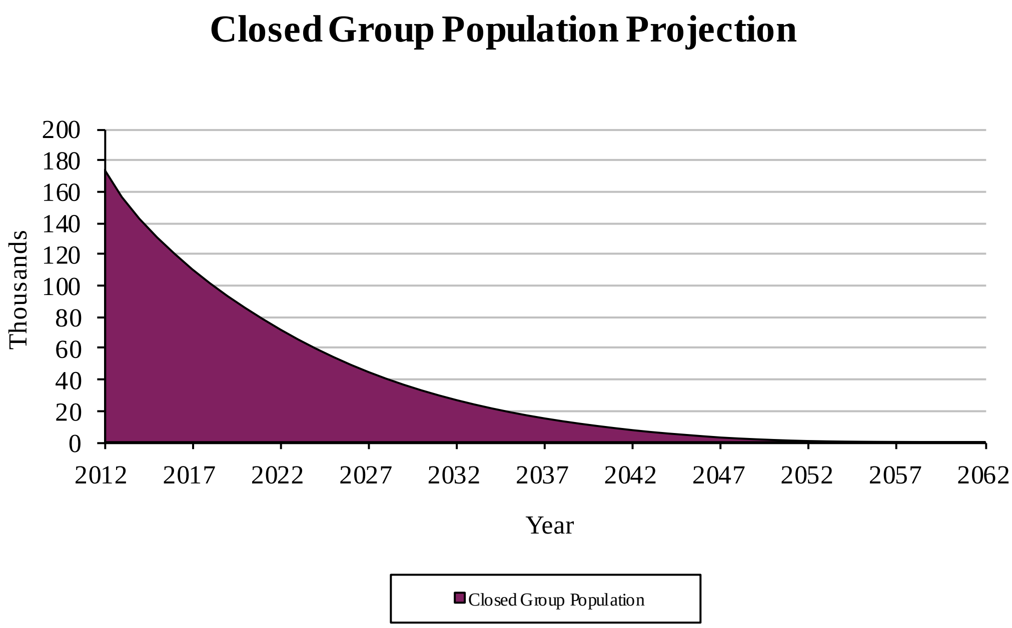
Rate Applies to Calendar Year	Rate Computed as of December 31	Employer Contribution Rate Expressed as % of Active Payroll: Regular Members Normal Cost	Regular Members Average Total Rate	SLEP Members Normal Cost	SLEP Members Average Total Rate	ECO Members Normal Cost	ECO Members Average Total Rate
1990	1988	6.94%	11.79%	7.90%	12.53%		
1991	1989	6.94%	11.60%	7.88%	12.02%		
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%**

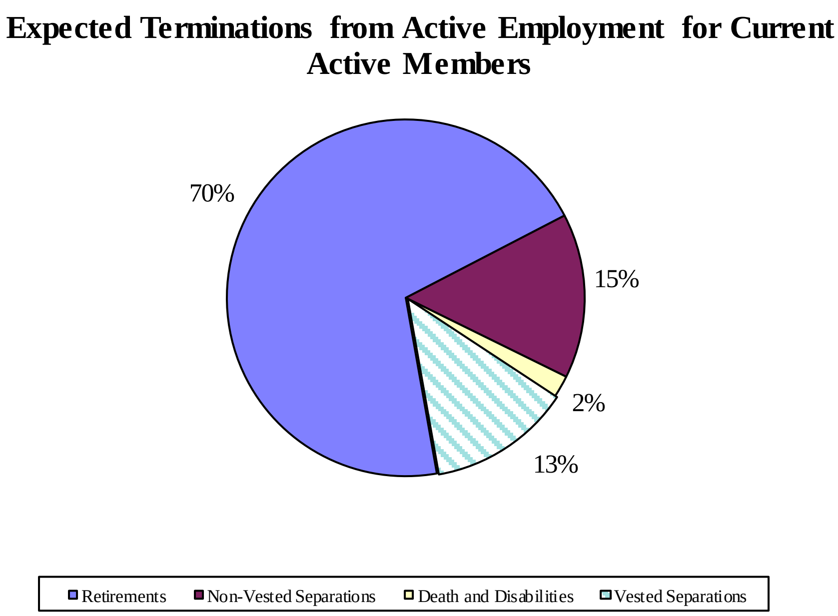
1 *Assumption change.*
2 *Benefit change.*
3 *Changed to payroll weighted average method.*
4 *Before optional phase-in plan.*

As shown above, the average employer contribution rates decreased this year for regular employers and SLEP 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. The rate for ECO employers increased substantially due to the closing of the ECO plan to new hires.

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, 2012





The charts above show the expected future development of the present population in simplified terms. The retirement system presently covers 174,381 active members. Eventually, 15% of the population is expected to terminate covered employment prior to retirement and forfeit eligibility for a monthly benefit. About 83% 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 Development During	
	2012	**2011**
Unfunded (Overfunded) Liability January 1	$5,251,527,844	$4,878,091,350
Assumed Net (Payments) Credits	(285,736,416)	(271,273,181)
Assumed Interest	383,278,615	355,806,713
Expected Unfunded Liability December 31	5,349,070,043	4,962,624,882
Increase/(Decrease) Due to Experience Study	0	181,134,110
Increase/(Decrease) Due to Benefit Changes	0	0
Increase/(Decrease) Due to Data Changes	0	0
Loss/(Gain) Due to Investment Experience	(71,019,991)	164,319,997
Loss/(Gain) Due to Other Sources	(166,615,738)	(56,551,145)
Actual Unfunded Liability December 31	$5,111,434,314	$5,251,527,844

UNFUNDED ACTUARIAL ACCRUED LIABILITIES COMPARATIVE STATEMENT

Valuation Date	(1) Actuarial Accrued Liabilities (AAL)	(2) Valuation Assets	(3) Unfunded AAL	(4) Valuation Payroll	(5) Funded Ratio (2)/(1)	(6) Unfunded/ Payroll (3)/(4)
1988	$ 4,941,412,403	$ 3,139,563,467	$ 1,801,848,936	$1,998,362,932	63.5%	90.2%
1989	5,429,420,300	3,589,732,873	1,839,687,427	2,141,472,213	66.1%	85.9%
1990*	6,234,602,259	4,468,795,967	1,765,806,292	2,303,544,906	71.7%	76.7%
1991*#	6,406,965,450	5,034,577,441	1,372,388,009	2,491,859,698	78.6%	55.1%
1992	6,954,483,358	5,615,583,858	1,338,899,500	2,634,441,716	80.7%	50.8%
1993*	7,509,766,239	6,396,329,900	1,113,436,339	2,709,280,078	85.2%	41.1%
1994	8,126,642,830	7,078,861,925	1,047,780,905	2,946,519,940	87.1%	35.6%
1995	8,823,697,487	8,034,030,783	789,666,704	3,095,916,750	91.1%	25.5%
1996*	9,778,592,519	9,076,261,663	702,330,856	3,084,086,668	92.8%	22.8%
1997	10,807,969,067	10,273,116,034	534,853,033	3,454,621,933	95.1%	15.5%
1998	11,860,879,198	11,636,495,534	224,383,665	3,696,047,942	98.1%	6.1%
1999*	13,005,023,293	13,520,192,111	(515,168,818)	3,952,129,535	104.0%	-
2000	14,153,055,774	15,169,369,271	(1,016,313,497)	4,184,702,169	107.2%	-
2001	15,318,517,575	16,305,022,254	(986,504,679)	4,503,092,615	106.4%	-
2002*	16,559,907,302	16,800,195,504	(240,288,202)	4,755,103,888	101.5%	-
2003	17,966,103,451	17,529,890,818	436,212,633	4,944,767,495	97.6%	8.8%
2004	19,424,667,016	18,315,987,910	1,108,679,106	5,161,127,432	94.3%	21.5%
2005 *#	20,815,060,842	19,698,401,285	1,116,659,557	5,374,585,943	94.6%	20.8%
2006	22,488,185,031	21,427,139,356	1,061,045,675	5,630,683,054	95.3%	18.8%
2007	24,221,543,716	23,274,361,198	947,182,518	5,931,443,117	96.1%	16.0%
2008 *	25,611,199,349	21,601,053,512	4,010,145,837	6,259,283,197	84.3%	64.1%
2009	27,345,113,216	22,754,803,784	4,590,309,432	6,461,696,602	83.2%	71.0%
2010	29,129,228,239	24,251,136,889	4,878,091,350	6,391,164,701	83.3%	76.3%
2011 *#	30,962,815,428	25,711,287,584	5,251,527,844	6,431,296,235	83.0%	81.7%
2012 *#	32,603,244,099	27,491,809,785	5,111,434,314	6,496,076,569	84.3%	78.7%

* *Assumption change.*
\# *Benefit 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 6) 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%.

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				Portion of Actuarial Liabilities Covered by Assets		
Calendar Year	(1) Non-Retired Contributions	(2) Annuitants	(3) Non-Retired Members (Employer Financed Portion)	Actuarial Assets	(1)	(2)	(3)
1997	$1,933,512,014	$3,995,946,514	$4,878,510,539	$ 10,273,116,034	100%	100%	89.0%
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%**

* *Assumption change.*
\# *Benefit change.*

Regular Members

Calendar Year	Aggregate Actuarial Liabilities For (1) Non-Retired Contributions	(2) Annuitants	(3) Non-Retired Members (Employer Financed Portion)	Actuarial Assets	Portion of Actuarial Liabilities Covered by Assets (1)	(2)	(3)
2004	$3,218,950,781	$6,775,766,071	$8,033,013,628	$17,183,420,531	100%	100%	89.5%
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%**

* *Assumption change.*
\# *Benefit change.*

SLEP Members

Calendar Year	Aggregate Actuarial Liabilities For (1) Non-Retired Contributions	(2) Annuitants	(3) Non-Retired Members (Employer Financed Portion)	Actuarial Assets	Portion of Actuarial Liabilities Covered by Assets (1)	(2)	(3)
2004	$186,737,395	$475,131,592	$516,744,548	$1,018,431,576	100%	100%	69.0%
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%**

* *Assumption change.*
\# *Benefit change.*

ECO Members

Calendar Year	Aggregate Actuarial Liabilities For (1) Non-Retired Contributions	(2) Annuitants	(3) Non-Retired Members (Employer Financed Portion)	Actuarial Assets	Portion of Actuarial Liabilities Covered by Assets (1)	(2)	(3)
2004	$18,097,549	$81,644,677	$118,580,776	$114,135,803	100%	100%	12.1%
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%**

* *Assumption change.*
\# *Benefit change.*

SECTION B

SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA

SUMMARY OF BENEFITS AND CONDITIONS EVALUATED DECEMBER 31, 2012

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).

SUMMARY OF BENEFITS AND CONDITIONS EVALUATED DECEMBER 31, 2012

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 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 ten years of qualifying service credit. SLEP members are vested for a SLEP pension when they have at least ten 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 ten years of total service but less than ten 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.

SUMMARY OF BENEFITS AND CONDITIONS EVALUATED DECEMBER 31, 2012

Lump Sum Death-In-Service Benefit

Less than 1 year of service: Member contributions plus interest.

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. 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 $109,971 was used in the December 31, 2012 valuation.

SUMMARY OF COVERED POPULATION DATA
DECEMBER 31, 2012

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

Member Status	No.	Valuation Payroll/Benefits	Average Pay/ Benefits	Average Age	Average Service
Active Members					
Regular Tier 1	148,973	$5,717,968,912	$38,383	49.5	11.9
Regular Tier 2	20,833	488,072,880	23,428	37.2	0.9
SLEP Tier 1	3,872	256,684,593	66,293	42.3	13.5
SLEP Tier 2	371	15,367,006	41,421	32.1	1.7
ECO / ECO SLEP Tier 1	330	17,953,443	54,404	55.8	13.9
ECO / ECO SLEP Tier 2	2	29,735	14,868	56.3	2.0
Total Active	174,381	$6,496,076,569	$37,252	47.8	10.6
Inactive Members					
Regular Tier 1	167,111			46.3	5.1
Regular Tier 2	412			33.8	1.2
SLEP Tier 1	1,079			44.8	9.9
SLEP Tier 2	6			35.3	2.4
ECO / ECO SLEP Tier 1	218			55.9	13.0
ECO / ECO SLEP Tier 2	0			0.0	0.0
(Inactive and Active)	(34,533)				
Total Inactive	134,293			46.3	5.1
Retirees & Beneficiaries	106,405	$1,354,403,976	$12,729	72.3	
Total Population	**415,079**				
Prior Year Total	409,415				

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 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, 2012
REGULAR, SLEP, ECO COMBINED

		Members			
Type of Employer	Rate Groups	Number	% of Total	Cumulative Percent	Payroll
School Districts	860	82,777	47.7%	47.7%	$ 2,299,319,560
Counties (Regular, SLEP,ECO)	269	31,147	17.9%	65.6%	1,372,983,388
Cities	302	18,727	10.7%	76.3%	965,602,672
Villages	461	14,270	8.2%	84.5%	794,966,222
Park Districts	200	7,853	4.5%	89.0%	303,427,366
Special Ed Districts	43	4,682	2.7%	91.7%	128,370,074
Townships	494	3,633	2.1%	93.8%	134,990,159
Library Districts	218	3,090	1.8%	95.6%	104,188,505
Forest Preserve Districts	13	968	0.6%	96.2%	47,080,869
Sanitary Districts	38	923	0.5%	96.7%	56,485,802
Consolidated Education Service Region	29	840	0.5%	97.2%	21,805,582
Towns	5	654	0.4%	97.6%	31,243,763
County Hospital Districts	3	628	0.4%	98.0%	27,545,775
Intergovernmental Coop	54	627	0.4%	98.4%	40,906,564
Mass Transit District (Taxing Authority)	4	581	0.3%	98.7%	29,243,647
Airport Authorities	12	284	0.2%	98.9%	15,290,075
Misc. Taxing Authority	8	256	0.1%	99.0%	15,722,187
Multi Co/Cons Health Dept.	4	248	0.1%	99.1%	8,230,272
Mass Transit Instrumentality	3	241	0.1%	99.2%	9,048,436
Joint Spec Rec Assns	15	238	0.1%	99.3%	10,567,982
Health Districts	4	226	0.1%	99.4%	9,137,134
Fire Protection Districts	57	202	0.1%	99.5%	11,990,546
Public Library System	2	157	0.1%	99.6%	5,801,886
Miscellaneous Instrumentality	16	149	0.1%	99.7%	9,032,864
Vocational System	40	139	0.1%	99.8%	4,811,580
County Conservation Districts	4	129	0.1%	99.9%	6,214,112
Public Hopusing Authority	8	116	0.1%	100.0%	4,492,634
Regional Planning Commission	1	85	0.0%	100.0%	5,685,229
Conservancy Districts	4	83	0.0%	100.0%	3,634,067
Public Housing Commission	6	61	0.0%	100.0%	2,640,522
County Road District	32	58	0.0%	100.0%	1,593,939
Water District	11	57	0.0%	100.0%	2,752,775
Special Ed Coop/Districts	13	56	0.0%	100.0%	3,894,634
Joint Education Projects	6	55	0.0%	100.0%	1,563,240
Educ Serv Centers	3	40	0.0%	100.0%	1,405,629
Water Supply/Sewr Comission	5	32	0.0%	100.0%	1,434,949
Mosquito Abatement District	7	30	0.0%	100.0%	1,868,154
Multi Twp Assessment Districts	14	13	0.0%	100.0%	285,007
ROE Office	1	12	0.0%	100.0%	388,909
Township Cemetary	13	9	0.0%	100.0%	238,121
Drainage District	2	5	0.0%	100.0%	191,738
Tuberculosis Sanitarium Districts	1	0	0.0%	100.0%	-
Employers with no Active Members or no Asset Information	236	0	0.0%	100.0%	-
Totals	**3,521**	**174,381**	**100.0%**	**100.0%**	**$6,496,076,569**

ACTIVE REGULAR MEMBERS
BY ATTAINED AGE AND YEARS OF SERVICE
DECEMBER 31, 2012

Attained	Years of Service to Valuation Date							Totals	
Ages	0-7	8-9	10-14	15-19	20-24	25-29	30 & Up	No.	Valuation Payroll
15 - 19	180							180	$ 2,287,006
20 - 24	4,773	1						4,774	96,597,407
25 - 29	10,864	287	56					11,207	317,561,260
30 - 34	9,560	1,321	1,610	43				12,534	452,659,875
35 - 39	8,088	1,265	3,256	881	50		1	13,541	515,906,685
40 - 44	9,802	1,500	3,450	2,263	911	53	7	17,986	674,355,924
45 - 49	10,739	2,062	4,851	2,618	2,090	1,000	79	23,439	877,308,388
50	2,174	499	1,250	741	479	366	128	5,637	215,462,242
51	2,167	486	1,372	737	481	421	203	5,867	223,227,571
52	2,149	479	1,418	842	548	381	297	6,114	236,343,817
53	2,015	440	1,384	908	555	414	399	6,115	240,600,246
54	1,892	467	1,402	890	566	398	453	6,068	234,912,464
55	1,713	443	1,430	961	639	412	503	6,101	243,523,975
56	1,736	435	1,364	1,012	637	382	482	6,048	236,285,615
57	1,505	383	1,178	976	659	346	437	5,484	215,788,332
58	1,424	320	1,074	916	680	347	406	5,167	204,563,555
59	1,323	361	1,014	884	637	339	358	4,916	189,977,959
60	1,306	314	926	842	594	339	334	4,655	180,657,800
61	1,137	316	893	669	616	331	310	4,272	164,912,736
62	1,035	268	739	644	468	312	286	3,752	141,998,650
63	821	234	610	473	425	228	207	2,998	114,020,800
64	729	204	508	390	376	223	175	2,605	94,726,166
65	613	170	434	335	261	198	146	2,157	78,517,898
66	589	127	375	270	226	141	113	1,841	65,751,122
67	389	79	226	157	123	85	82	1,141	38,767,549
68	278	80	188	136	78	56	66	882	28,979,575
69	290	92	173	103	78	48	48	832	26,154,305
70	256	66	154	112	61	48	52	749	21,840,448
Over 70	879	239	574	424	242	166	220	2,744	72,352,422
Totals	**80,426**	**12,938**	**31,909**	**19,227**	**12,480**	**7,034**	**5,792**	**169,806**	**$6,206,041,792**

ACTIVE SLEP MEMBERS
BY ATTAINED AGE AND YEARS OF SERVICE
DECEMBER 31, 2012

Attained Ages	Years of Service to Valuation Date 0-7	8-9	10-14	15-19	20-24	25-29	30 & Up	Totals No.	Totals Valuation Payroll
20 - 24	54							54	$ 2,034,371
25 - 29	445	13	1					459	23,388,691
30 - 34	422	138	99	1				660	37,052,965
35 - 39	207	78	284	92	3			664	41,408,520
40 - 44	158	78	218	293	93	1		841	56,374,758
45 - 49	78	31	108	153	259	78	4	711	51,398,318
50	6	3	14	23	39	31	10	126	9,588,916
51	5	4	18	16	29	24	2	98	7,025,239
52	10	6	14	19	16	10	4	79	5,537,659
53	8	5	10	17	18	17	1	76	5,332,830
54	10	4	9	13	16	13	6	71	5,068,449
55	11	3	5	10	10	11	3	53	3,828,189
56	7	3	6	6	13	12	6	53	3,699,689
57	6	6	10	11	13	4	4	54	3,636,732
58	12	2	5	5	7	4	4	39	2,412,511
59	8		8	7	5	10	3	41	2,696,734
60	8	1	10	9	7	2	4	41	2,832,299
61	3	3	3	7	3	2	5	26	1,751,256
62	2	3	5	3	3	4	1	21	1,474,347
63	5		3	4	2	1	3	18	1,256,228
64	3		4	3	5	1	2	18	1,331,157
65	4	2	3	2		1	4	16	1,146,408
66			2				2	4	402,891
67	1	1		2		1	1	6	514,108
68		1					1	2	104,671
69				1				1	78,556
70				1				1	73,388
Over 70	2	1	1	3	1	1	1	10	601,719
Totals	**1,475**	**386**	**840**	**701**	**542**	**228**	**71**	**4,243**	**$272,051,599**

ACTIVE ECO REGULAR MEMBERS
BY ATTAINED AGE AND YEARS OF SERVICE
DECEMBER 31, 2012

Attained	Years of Service to Valuation Date							Totals	
Ages	0-7	8-9	10-14	15-19	20-24	25-29	30 & Up	No.	Valuation Payroll
25-29	2							2	$ 59,505
30-34	4							4	283,256
35-39	7	1	4	1				13	957,390
40-44	10	1	4	1	1			17	1,059,154
45-49	8	4	6	4	3	3	2	30	1,905,033
50	6	1	4		2	1		14	977,137
51	5	2	3	1	2		2	15	512,325
52	4	1		1	2		1	9	436,048
53	1	1	2	1	2		1	8	354,066
54	6		2	3		2	1	14	1,096,579
55	1		8	1	1	3	1	15	830,859
56	4	1	8	2	2		2	19	836,512
57	1	1	3	3	2	1	1	12	730,887
58	6	3	1	3		2	5	20	1,257,833
59	3		1	3			2	9	277,448
60	4	2	3	3	4		1	17	1,191,344
61	4	3	1	1	1		1	11	407,341
62		1	5	1	1	1		9	460,578
63	3	1	4	1				9	367,404
64			3	3	2		1	9	455,901
65	1	1	2	2			1	7	268,071
66		1	3				1	5	342,074
67	2	1	1				1	5	141,112
68	1		1				1	3	202,720
69	1			1		1		3	102,905
70		1				1		2	42,419
Over 70	7	2	5	2	5	2	2	25	333,274
Totals	**91**	**29**	**74**	**38**	**30**	**17**	**27**	**306**	**$15,889,175**

ACTIVE ECO SLEP MEMBERS
BY ATTAINED AGE AND YEARS OF SERVICE
DECEMBER 31, 2012

Attained Ages	Years of Service to Valuation Date							Totals	
	0-7	8-9	10-14	15-19	20-24	25-29	30 & Up	No.	Valuation Payroll
45-49	5	1	2	1				9	$ 677,887
50					1			1	65,113
51			1					1	66,500
55			1					1	71,471
56	1		2					3	186,022
57			1					1	51,806
61			1					1	74,407
62			1	1		1	3	6	588,501
63			1					1	121,923
64	1				1			2	190,373
Totals	**7**	**1**	**10**	**2**	**2**	**1**	**3**	**26**	**$2,094,003**

ALL ACTIVE MEMBERS BY YEARS OF SERVICE AND GENDER
DECEMBER 31, 2012

Service	Active Member Count			Active Member Pays	
Years	Males	Females	Total	Total	Average
0	5,327	9,719	15,046	$ 328,616,992	$ 21,841
1	4,377	7,276	11,653	299,077,710	25,665
2	3,304	5,556	8,860	243,923,062	27,531
3	3,163	5,338	8,501	237,263,459	27,910
4	3,760	6,530	10,290	314,959,028	30,608
5	3,549	6,765	10,314	325,348,071	31,544
6	3,065	6,010	9,075	301,840,279	33,261
7	2,988	5,275	8,263	289,042,643	34,980
8	2,517	4,563	7,080	255,002,626	36,017
Sub-Total	32,050	57,032	89,082	2,595,073,870	29,131
9	2,309	3,963	6,272	233,138,143	37,171
10	2,270	4,193	6,463	247,418,187	38,282
11	2,427	4,833	7,260	277,577,199	38,234
12	2,307	4,597	6,904	276,808,508	40,094
13	2,160	4,348	6,508	267,232,695	41,062
14	1,868	3,829	5,697	238,213,375	41,814
15 & Up	19,402	26,793	46,195	2,360,614,592	51,101
Totals	**64,793**	**109,588**	**174,381**	**$6,496,076,569**	**$37,252**

INACTIVE REGULAR MEMBERS
BY ATTAINED AGE AND YEARS OF SERVICE
DECEMBER 31, 2012

Attained	Years of Service to Valuation Date							Totals
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	No.
15-19	72							72
20-24	2,642	9						2,651
25-29	12,187	203						12,390
30-34	15,666	678	74	2			1	16,421
35-39	13,850	968	233	19			6	15,076
40-44	15,210	1,299	508	133	22	1	15	17,188
45-49	14,875	1,804	856	294	122	38	32	18,021
50	2,758	464	216	113	50	14	17	3,632
51	2,832	505	305	112	55	15	29	3,853
52	2,873	575	314	130	53	22	17	3,984
53	2,802	549	373	144	88	47	26	4,029
54	2,802	545	339	122	79	40	35	3,962
55	2,728	511	309	106	56	33	31	3,774
56	2,571	402	180	64	31	10	22	3,280
57	2,320	364	138	34	21	9	12	2,898
58	2,488	331	110	39	14	8	17	3,007
59	2,153	328	102	42	21	7	12	2,665
60	1,957	253	85	38	14	6	9	2,362
61	2,138	246	69	22	20	5	10	2,510
62	1,506	203	47	22	7	12	11	1,808
63	1,347	154	35	12	9	9	13	1,579
64	1,114	119	23	12	12	9	7	1,296
65	1,080	106	31	11	7	3	1	1,239
66	1,001	117	25	9	3	2	6	1,163
67	581	70	8	9		1	2	671
68	463	40	17	6	2		4	532
69	417	43	7		1		1	469
70	488	54	7	1	1			551
Over 70	2,208	103	25	8	2	1	12	2,359
Totals	**115,129**	**11,043**	**4,436**	**1,504**	**690**	**292**	**348**	**133,442**

INACTIVE SLEP MEMBERS
BY ATTAINED AGE AND YEARS OF SERVICE
DECEMBER 31, 2012

Attained	Years of Service to Valuation Date							Totals
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	No.
15-19								
20-24	4							4
25-29	59	2						61
30-34	76	13						89
35-39	51	25	11	1				88
40-44	69	23	16	3	3		3	117
45-49	42	14	21	9	9		5	100
50	10	6	5	3	4		2	30
51	5	3	4	1	1		1	15
52	7	3	5	1	1			17
53	10	1	11	1	1	1	3	28
54	9	6	6	3				24
55	5	2		1				8
56	5	2	1	2			1	11
57	8	1	2	1			1	13
58	5	1		1				7
59	12	4			1	1	1	19
60	11		1					12
61	7	1					2	10
62	4		1				1	6
63	4					1		5
64	2						1	3
65		1						1
66	3						1	4
67	1						1	2
68	3			1			1	5
69	4		1					5
70	1							1
Over 70	3							3
Totals	**420**	**108**	**85**	**28**	**20**	**3**	**24**	**688**

INACTIVE ECO MEMBERS
BY ATTAINED AGE AND YEARS OF SERVICE
DECEMBER 31, 2012

Attained	Years of Service to Valuation Date							Totals
Ages	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30 & Up**	**No.**
15-19								
20-24								
25-29								
30-34								
35-39	2	1						3
40-44	3	8	4					15
45-49	4	11	5	3		2		25
50	1	4		1				6
51		3	1			1		5
52	3	6	1		1			11
53	1	4	3	1	1			10
54	1	2	2	2	2			9
55	4	2	3	1		1		11
56	5	2	2	1	1			11
57	1	3	2					6
58	2		1	1				4
59		3	1	2	2			8
60	2	1		1				4
61			1					1
62								
63	3		1	2	1			7
64	1	2						3
65	1	1		1				3
66	1	1						2
67		2	1				1	4
68	1	1					1	3
69								
70	1							1
Over 70	2	2	4	1	1		1	11
Totals	**39**	**59**	**32**	**17**	**9**	**4**	**3**	**163**

RETIREES AND BENEFICIARIES
DECEMBER 31, 2012

	Annual Amounts by Form of Payment					
	Regular		Level Payment Option		Total	
Type of Retirement	**No.**	**Amount**	**No.**	**Amount**	**No.**	**Amount**
Normal or Early						
Joint and 50% Survivor	52,410	$ 697,949,196	15,598	$ 242,269,992	68,008	$ 940,219,188
Joint and 66% Survivor	337	$12,314,412	80	$4,015,332	417	16,329,744
Straight Life	17,572	233,694,120	4,350	77,787,096	21,922	311,481,216
Total	70,319	943,957,728	20,028	324,072,420	90,347	1,268,030,148
Disability	470	3,887,916	-	0	470	3,887,916
Surviving Beneficiaries	12,040	73,767,972	643	6,232,224	12,683	80,000,196
Voluntary Contributions	2,905	2,485,716	-	0	2,905	2,485,716
Grand Total	**85,734**	**$1,024,099,332**	**20,671**	**$330,304,644**	**106,405**	**$1,354,403,976**

Voluntary Contributions includes annuitization of certain surviving spouse and SLEP refund amounts. Of the 2,905 retirees listed as receiving Voluntary contribution, 2,892 retirees are also in receipt of a separate retirement benefit.

Thirteenth 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.

RETIREES AND BENEFICIARIES BY ATTAINED AGE DECEMBER 31, 2012

Attained Ages	Number			Annual Benefits
	Males	Females	Total	
Under 20	2	4	6	$ 14,184
20 - 24	4	6	10	12,564
25 - 29	8	10	18	86,748
30 - 34	9	10	19	58,188
35 - 39	9	11	20	146,052
40 - 44	20	29	49	333,240
45 - 49	37	69	106	859,596
50 - 54	336	280	616	16,345,044
55 - 59	3,381	4,694	8,075	162,191,772
60 - 64	6,175	10,805	16,980	287,440,980
65 - 69	6,748	14,216	20,964	289,659,312
70 - 74	5,738	12,593	18,331	226,199,844
75 - 79	4,722	10,088	14,810	161,962,104
80 - 84	3,648	8,408	12,056	111,410,292
85 - 89	2,526	6,240	8,766	66,198,336
90 - 94	1,041	3,287	4,328	26,195,508
95 & Up	238	1,013	1,251	5,290,212
Totals	**34,642**	**71,763**	**106,405**	**$1,354,403,976**

RETIREES AND BENEFICIARIES BY YEAR OF RETIREMENT
DECEMBER 31, 2012

Year of Retirement	Number: Males	Females	Total	Annual Benefits
2012	2,685	4,873	7,558	$ 112,111,992
2011	2,788	5,129	7,917	121,209,960
2010	2,818	4,923	7,741	121,097,412
2009	2,389	3,945	6,334	97,156,308
2008	2,049	3,723	5,772	83,717,964
2007	2,057	3,877	5,934	82,297,572
2006	1,846	3,455	5,301	73,494,876
2005	1,813	3,384	5,197	67,475,196
2004	1,653	3,055	4,708	68,375,088
2003	1,672	3,013	4,685	64,483,476
2002	1,358	2,680	4,038	52,138,992
2001	1,184	2,463	3,647	41,377,572
2000	983	2,327	3,310	37,466,520
1999	1,201	2,402	3,603	45,015,672
1998	1,144	2,267	3,411	46,464,912
1997	988	2,211	3,199	40,087,848
1996	833	2,039	2,872	34,562,928
1995	716	1,843	2,559	25,267,836
1994	616	1,659	2,275	22,259,196
1993	582	1,502	2,084	19,603,896
1992	509	1,324	1,833	16,852,860
1991	406	1,183	1,589	13,727,772
1990	404	1,139	1,543	12,734,640
1985 - 1989	1,371	4,440	5,811	40,967,784
1980 - 1984	471	2,015	2,486	12,079,416
1975 - 1979	100	712	812	2,059,428
1970 - 1974	4	155	159	288,732
Before 1970	2	25	27	28,128
Total	**34,642**	**71,763**	**106,405**	**$1,354,403,976**

DATA REPORTED FOR ACTUARIAL VALUATIONS
COMPARATIVE SUMMARY

Date	Total	Active Members					Number		Ratio:
			Average						
December 31	Count	Number	Age	Serv.	Annual Pay	Pay Increase	Inactive	Retired	Act/Ret.
1988	208,237	115,050	43.1	7.2	$17,370	4.6 %	47,305	45,882	2.50
1989	221,145	118,670	43.1	7.2	18,046	3.9 %	53,470	49,005	2.40
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

* *Changed method of recording earnings for 1996 valuation.*
\+ *Restated subsequent to release of 2000 valuation.*

SECTION C

FINANCIAL DATA

DEVELOPMENT OF FUNDING VALUE OF RETIREMENT SYSTEM ASSETS

Year Ended December 31	2010	2011	2012	2013	2014	2015	2016
A. Funding Value Beginning of Year	$22,754,803,784	$24,251,136,889	$25,711,287,584				
B. Market Value End of Year	25,132,408,091	24,833,689,793	27,995,289,198				
C. Market Value Beginning of Year	22,282,188,251	25,132,408,091	24,833,689,793				
D. Non-Investment/Administrative Net Cash Flow	(115,462,932)	(187,339,349)	(210,934,322)				
E. Investment Return							
E1. Market Total: B-C-D	2,965,682,772	(111,378,949)	3,372,533,727				
E2. Assumed Rate of Return	7.50%	7.50%	7.50%				
E3. Assumed Amount of Return	**1,702,280,424**	**1,811,810,041**	**1,920,436,532**	--------------------------------	Scheduled	----------------------------------	
E4. Return Subject to Phase-In: E1-E3	1,263,402,348	(1,923,188,990)	1,452,097,195				
F. Phased-In Recognition of Investment Return							
F1. Current year: 0.20 x E4	252,680,470	(384,637,798)	290,419,439	Unknown	Unknown	Unknown	Unknown
F2. First Prior Year	556,879,039	220,317,801	(219,399,448)	$ 125,869,853	Unknown	Unknown	Unknown
F3. Second Prior Year	(900,043,896)	-	-	-	$ 125,869,853	Unknown	Unknown
F4. Third Prior Year	-	-	-	-	-	$ 125,869,853	Unknown
F5. Fourth Prior Year	-	-	-	-	-	-	$ 125,869,854
F6. Funding Corridor Adjustment	-	-	-				
F7. Total Scheduled Phase-in of gain/(loss)	**(90,484,387)**	**(164,319,997)**	**71,019,991**	125,869,853	125,869,853	125,869,853	125,869,854
G. Acceptable Phase-in of Investment Return							
G1. Projected Funding Value without Phase-in: A+D+E3	**24,341,621,276**	**25,875,607,581**	**27,420,789,794**				
G2. Limit on Phase-in: B-G1	790,786,815	(1,041,917,788)	574,499,404				
G3. Acceptable Phase-in Amount	(90,484,387)	(164,319,997)	71,019,991				
H. Funding Value End of Year: A+D+E3+G3	**$24,251,136,889**	**$25,711,287,584**	**$27,491,809,785**				
I. Difference Between Market and Funding Value	881,271,202	(877,597,791)	503,479,413	377,609,560	251,739,707	125,869,854	-
J. Recognized Rate of Return	7.1%	6.8%	7.8%				
K. Market Rate of Return	13.3%	-0.4%	13.6%				
L. Ratio of Funding Value to Market Value	96.5%	103.5%	98.2%				

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.

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 December 31	
	2012	**2011**
1. Funding Value of End of Year	$ 27,491,809,785	$ 25,711,287,584
2. Amounts not used in rate calculations		
a. Suspended Annuity Reserve	25,577,004	23,556,805
b. Disability Benefit Reserve	15,469,705	16,008,450
c. Death Benefit Reserve	12,903,323	11,467,567
d. Supplemental Benefit Reserve	707,286	313,841
e. Cases removed from rate calculations*	36,019,074	36,130,883
f. Estimated pending reserve transfers	-	-
g. Total	90,676,392	87,477,546
3. Remaining amount to allocate: (1)-(2g)	27,401,133,393	25,623,810,038
4. Total reported negative reserves	(2,652,111)	(2,107,668)
5. Amount available to positive reserves: (3)-(4)	27,403,785,504	25,625,917,706
6. Total Market Value of reported positive reserves	27,960,995,174	24,888,916,516
7. Market Value Adjustment: (5)-(6)	**$ (557,209,670)**	**$ 737,001,190**

* *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

	Market Value		Percentage of Total	
	2012	2011	2012	2011
Investment Portfolio				
Fixed income	$ 8,305,384,947	$ 7,587,530,545	29.8%	30.8%
Short term	147,168,828	143,422,728	0.5%	0.6%
Foreign exchange contracts	(1,733,147)	847,683	0.0%	0.0%
Stocks	11,186,794,138	9,843,240,724	40.2%	39.9%
Bond funds	-	-	0.0%	0.0%
Stock funds and index funds	5,738,820,443	4,857,789,413	20.6%	19.7%
Options	-	-	0.0%	0.0%
Real estate	793,918,577	712,759,150	2.9%	2.9%
Alternative investments	1,272,632,775	986,369,450	4.6%	4.0%
Master trust reserve fund	626,698,308	865,760,284	2.3%	3.5%
Cash	-	-	0.0%	0.0%
Due from brokers	-	-	0.0%	0.0%
Due (to) brokers	(333,050,665)	(411,798,641)	(1.2)%	(1.7)%
Accrued investment income	82,662,664	82,482,044	0.3%	0.3%
Total Invested Assets	**$27,819,296,868**	**$24,668,403,380**	100.0%	100.0%
Receivables	**170,537,092**	**175,816,298**		
Cash	**35,035,181**	**22,314,101**		
Fixed Assets	**5,138,712**	**5,146,784**		
Total Market Value	**$28,030,007,853**	**$24,871,680,563**		
Liabilities				
Benefits & vouchers payable	34,718,655	37,990,770		
Securities Lending Payable	-	-		
Total Liabilities	**34,718,655**	**37,990,770**		
Nets Assets Available for Benefits	**$27,995,289,198**	**$24,833,689,793**		

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.

SECTION D

ACTUARIAL METHODS AND ASSUMPTIONS

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 4.00% 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 3.0% to 3.5% 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 3.5%. The assumed real rate of return over price inflation would be higher – on the order of 4.0% to 4.5%, 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 – 4.00% 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 4.00% 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 2008-2010 period (please see report dated December 8, 2011), and were first used in the December 31, 2011 valuation. Decrement assumptions are shown for sample ages beginning on page D-3.

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 income 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, 2012
PROBABILITIES OF AGE & SERVICE RETIREMENT

Tier 1

Age at Retirement	Regular Reduced Early Males	Regular Reduced Early Females	Regular Normal Males	Regular Normal Females	SLEP Normal Service less than 32 years	SLEP Normal Service 32 years or more	ECO-Regular Normal Males	ECO-Regular Normal Females	ECO-SLEP Normal Males & Females
50					23%	40%			23%
51					18%	40%			18%
52					13%	40%			13%
53					8%	40%			8%
54					23%	40%			23%
55	7.25%	5.75%	33%	27%	23%	40%	30%	30%	23%
56	7.25%	5.75%	25%	22%	18%	40%	25%	25%	18%
57	7.25%	5.75%	25%	22%	23%	40%	25%	25%	23%
58	7.25%	5.75%	25%	22%	33%	40%	25%	25%	33%
59	7.25%	5.75%	25%	22%	13%	40%	25%	25%	13%
60			12%	10%	8%	40%	5%	5%	8%
61			12%	10%	8%	40%	5%	5%	8%
62			22%	18%	23%	40%	20%	15%	23%
63			20%	18%	18%	40%	15%	15%	18%
64			20%	18%	18%	40%	15%	15%	18%
65			25%	23%	23%	40%	30%	20%	23%
66			30%	23%	23%	40%	25%	15%	23%
67			25%	23%	23%	40%	20%	15%	23%
68			20%	18%	23%	40%	13%	13%	23%
69			20%	18%	23%	40%	13%	13%	23%
70			20%	18%	100%	100%	13%	13%	100%
71-79			20%	18%	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.

PROBABILITIES OF AGE & SERVICE RETIREMENT

Tier 2

	Regular								SLEP					
	Male				Female				Male			Female		
	Normal			Early	Normal			Early	Normal		Early	Normal		Early
Age	Service Less then 30 Years	Service Between 30 and 35 Years	Service 35 Years or More		Service Less then 30 Years	Service Between 30 and 35 Years	Service 35 Years or more		Service Less than 30 Years	Service 30 Years or More		Service Less than 30 Years	Service 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, 2012
PROBABILITIES OF SEPARATION FROM ACTIVE MEMBER STATUS

Tier 1 and Tier 2

	% Separating Next Year					
	Regular		ECO			
Service	Males	Females	Males	Females	SLEP	ECO-SLEP
0	24.0%	28.5%	20.0%	15.0%	16.0%	16.0%
1	18.0%	21.0%	12.0%	10.0%	10.0%	10.0%
2	13.0%	15.0%	10.0%	8.0%	7.7%	8.0%
3	10.5%	12.0%	9.0%	7.0%	6.8%	6.0%
4	8.5%	10.0%	8.0%	6.0%	5.0%	5.0%
5	7.2%	8.3%	7.0%	5.0%	4.2%	4.5%
6	6.0%	6.8%	6.0%	4.0%	3.5%	4.0%
7	5.5%	6.2%	5.5%	3.5%	N/A	N/A
Age	8 or More Years of Service		8 or More Years of Service		7 or More Years of Service	7 or More Years of Service
30	4.1%	6.1%	5.5%	3.5%	3.2%	1.5%
35	3.3%	4.9%	5.5%	3.5%	2.1%	1.5%
40	2.7%	3.9%	5.5%	3.5%	1.7%	1.5%
45	2.3%	3.2%	5.5%	3.5%	1.7%	1.5%
50	2.0%	2.7%	5.5%	3.5%	1.7%	1.5%

ACTIVE MEMBER PROBABILITIES OF DEATH AND DISABILITY

Tier 1 and Tier 2

Sample Ages	% Dying			
	Regular & ECO		SLEP & ECO-SLEP	
	Male	Female	Male	Female
20	0.02%	0.01%	0.02%	0.01%
25	0.02%	0.01%	0.02%	0.01%
30	0.03%	0.01%	0.03%	0.01%
35	0.05%	0.02%	0.06%	0.02%
40	0.06%	0.02%	0.07%	0.02%
45	0.08%	0.03%	0.09%	0.03%
50	0.10%	0.05%	0.12%	0.05%
55	0.17%	0.09%	0.20%	0.09%
60	0.34%	0.18%	0.39%	0.18%
65	0.67%	0.35%	0.77%	0.35%
70	1.15%	0.61%	1.31%	0.61%
75	2.00%	0.96%	2.28%	0.96%
80	3.69%	1.59%	4.21%	1.59%

Sample Ages	% Disabled							
	Regular		ECO		SLEP		ECO-SLEP	
	Male	Female	Male	Female	Male	Female	Male	Female
20	0.01%	0.00%	0.01%	0.01%	0.01%	0.01500%	0.02%	0.02%
25	0.01%	0.00%	0.01%	0.01%	0.02%	0.03%	0.03%	0.03%
30	0.01%	0.00%	0.01%	0.01%	0.02%	0.05%	0.05%	0.05%
35	0.02%	0.01%	0.03%	0.02%	0.04%	0.07%	0.07%	0.07%
40	0.03%	0.01%	0.04%	0.03%	0.05%	0.10%	0.10%	0.10%
45	0.05%	0.02%	0.06%	0.04%	0.08%	0.14%	0.14%	0.14%
50	0.07%	0.03%	0.09%	0.06%	0.11%	0.21%	0.21%	0.21%
55	0.11%	0.05%	0.15%	0.10%	0.16%	0.29%	0.29%	0.29%
60	0.14%	0.09%	0.19%	0.17%	0.14%	0.27%	0.27%	0.27%
65	0.15%	0.11%	0.20%	0.20%	0.10%	0.18%	0.18%	0.18%
70	0.13%	0.09%	0.17%	0.17%	0.06%	0.11%	0.11%	0.11%
75	0.09%	0.07%	0.12%	0.12%	0.02%	0.03%	0.03%	0.03%
80	0.08%	0.06%	0.10%	0.10%	0.00%	0.00%	0.00%	0.00%

RETIREE, BENEFICIARY, TERMINATED VESTED AND DISABLED LIFE MORTALITY

Tier 1 and Tier 2

	% Dying Next Year			
	Non-Disabled Lives		Disabled Lives	
Sample Ages	Males	Females	Males	Females
40	0.1103%	0.0480%	0.1784%	0.1094%
45	0.1393%	0.0749%	0.2963%	0.2129%
50	0.1784%	0.1094%	0.5864%	0.4207%
55	0.2963%	0.2129%	1.1528%	0.8078%
60	0.5864%	0.4207%	1.9696%	1.3933%
65	1.1528%	0.8078%	3.4246%	2.2020%
70	1.9696%	1.3933%	6.3176%	3.6677%
75	3.4246%	2.2020%	11.5488%	6.3171%
80	6.3176%	3.6677%	20.3136%	11.4082%

	Life Expectancy Years			
	Non-Disabled Retired Lives		Disabled Lives	
Sample Ages	Males	Females	Males	Females
40	40.8	45.1	31.3	35.4
45	36.0	40.2	26.6	30.6
50	31.3	35.4	22.1	26.1
55	26.6	30.6	17.8	21.7
60	22.1	26.1	14.0	17.7
65	17.8	21.7	10.5	14.1
70	14.0	17.7	7.5	10.8
75	10.5	14.1	5.2	7.9
80	7.5	10.8	3.5	5.7

For non-disabled lives, the mortality rates are from the RP-2000 Combined Healthy Mortality Table, adjusted for mortality improvements to 2020 using projection scale AA. For men 120% of the table rates were used. For women 92% of the table rates were used. For disabled lives, the mortality rates are the rates applicable to non-disabled lives set forward 10 years.

Tier 1 and Tier 2

% Increase in Pay Next Year					
6 or More Years Service				Additional Increase For Those With Less Than 6 Years of Service	
Age	Merit & Longevity	Economic	Total	Service	% Increase
25	2.0%	4.0%	6.0%	0	7.0%
30	1.7%	4.0%	5.7%	1	5.0%
35	1.2%	4.0%	5.2%	2	3.5%
40	0.9%	4.0%	4.9%	3	3.0%
45	0.7%	4.0%	4.7%	4	2.0%
50	0.6%	4.0%	4.6%	5	1.5%
55	0.5%	4.0%	4.5%		
60	0.4%	4.0%	4.4%		

For a person with 6 or more years of service, the assumed pay increase during the coming year is found in the 6 or more years of service total column. For a person with less than 6 years of service, the % increase from the less than 6 years column that corresponds to the person's service is added to the increase from the 6 or more years of service total column that corresponds to the person's age to get the total assumed increase. For example, a 40-year-old with 8 years of service is assumed to get a 4.9% pay increase during the coming year. But a 40-year-old with 4 years of service is assumed to get a 6.9% increase (4.9% + 2.0%).

PAY INCREASES FOR SLEP AND ECO-SLEP ACTIVE MEMBERS

Tier 1 and Tier 2

% Increase in Pay Next Year Years of Service			
Service	Economic	Merit & Longevity	% Total Increase
1	4.00%	12.00%	16.00%
2	4.00%	9.00%	13.00%
3	4.00%	4.30%	8.30%
4	4.00%	3.80%	7.80%
5	4.00%	3.00%	7.00%
6	4.00%	2.50%	6.50%
7	4.00%	1.50%	5.50%
8	4.00%	1.25%	5.25%
9	4.00%	1.00%	5.00%
10	4.00%	0.75%	4.75%
11	4.00%	0.75%	4.75%
12	4.00%	0.75%	4.75%
13	4.00%	0.50%	4.50%
14	4.00%	0.50%	4.50%
15	4.00%	0.50%	4.50%
16	4.00%	0.50%	4.50%
17	4.00%	0.50%	4.50%
18	4.00%	0.50%	4.50%
19	4.00%	0.50%	4.50%
20	4.00%	0.50%	4.50%
21	4.00%	0.50%	4.50%
22	4.00%	0.50%	4.50%
23	4.00%	0.50%	4.50%
24	4.00%	0.50%	4.50%
25	4.00%	0.50%	4.50%
26	4.00%	0.50%	4.50%
27	4.00%	0.50%	4.50%
28	4.00%	0.50%	4.50%
29	4.00%	0.50%	4.50%
30	4.00%	0.50%	4.50%

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.
Normal Form of Benefit:	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.

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, 2012 valuation annual pension increases were assumed to grow at an annual rate of 1.75%. 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 $109,971 was used for Tier 2 members in the December 31, 2012 valuation. In the December 31, 2012 valuation, the wage cap was assumed to grow at an annual rate of 1.75%.

FINANCING UNFUNDED ACCRUED LIABILITIES AND FULL FUNDING CREDITS DECEMBER 31, 2012 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): 30-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.

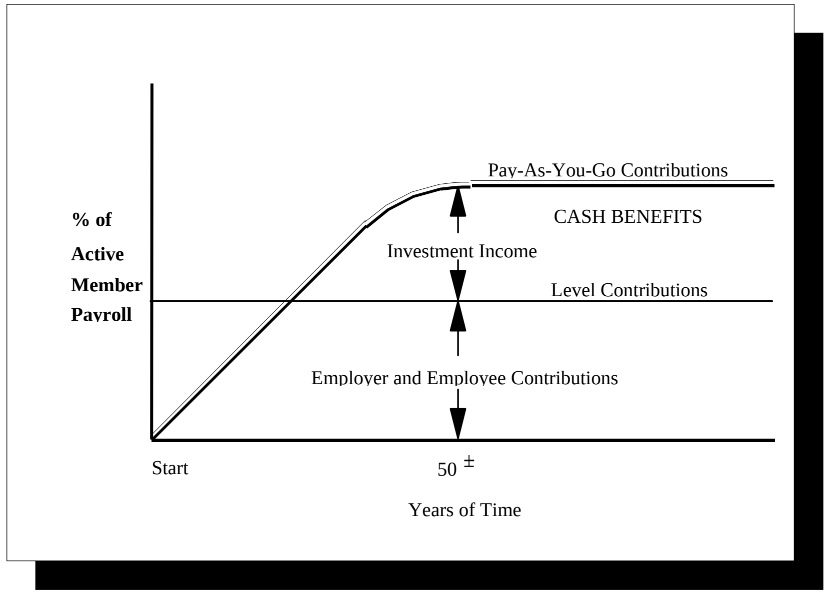
4. Irrespective of the size of the employer or the funding level, grant the employer an option to amortize overfunding over 120% over a 5-year period.
5. For employers with 50 or more employees, grant the employer an option to adopt a minimum contribution rate until the overfunding is reduced to 120%.
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 25 years for most employers (two employers were financed over 34 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 ...

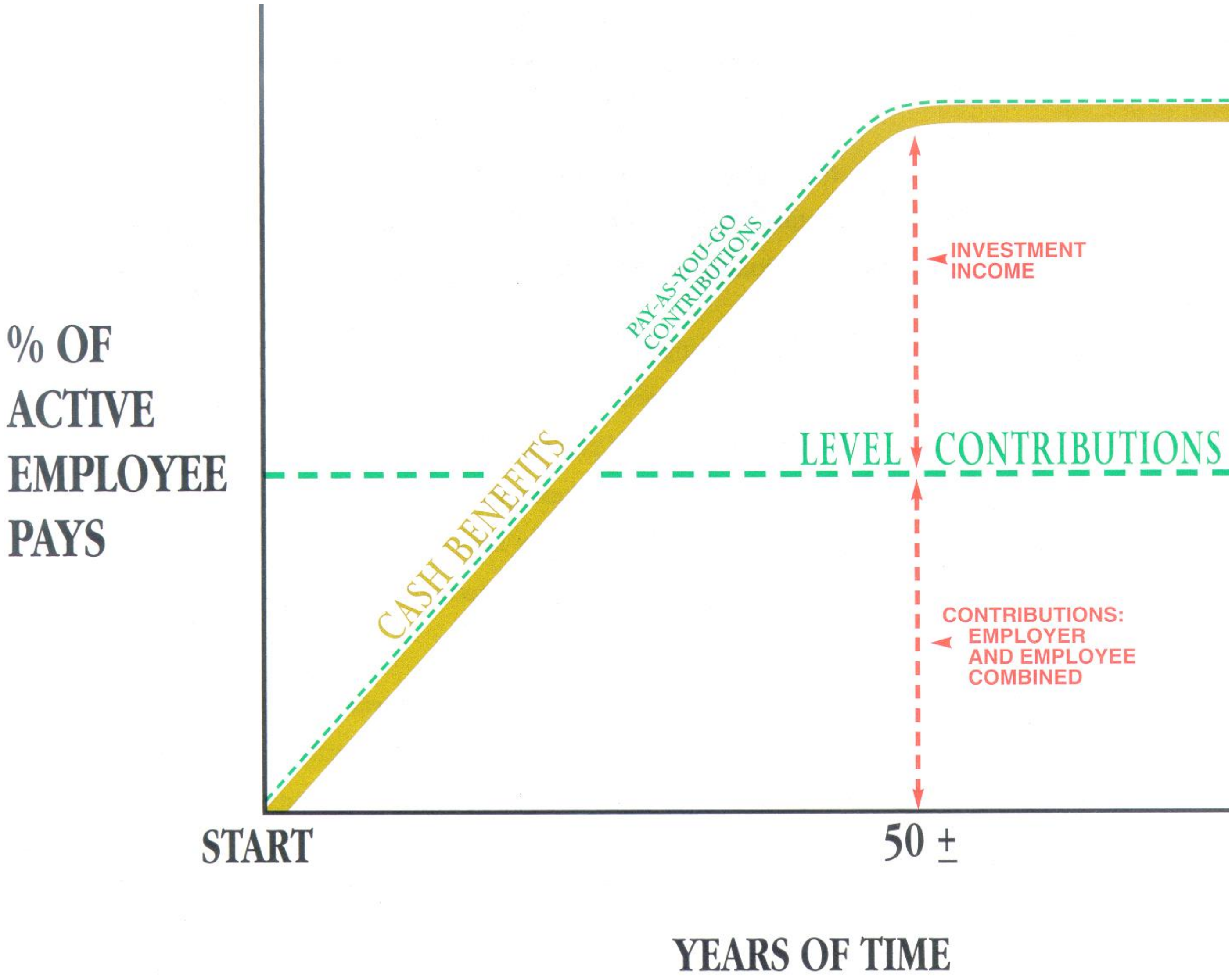
Interest at the assumed real rate of return on Unfunded Actuarial Accrued Liabilities (unfunded actuarial accrued liabilities are the difference between: accrued liabilities for service already rendered; and the accrued assets of IMRF).

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.



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 10, 2013

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

Re: December 31, 2012 Actuarial Valuation

Dear Dick:

Enclosed are 40 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:mrb
Enclosures