



**ILLINOIS MUNICIPAL RETIREMENT FUND
Annual Actuarial Valuation**

December 31, 2004



Gabriel, Roeder, Smith & Company



TABLE OF CONTENTS

Section	Pages	Item
	1-3	Introduction
A		Valuation Results
	1-2	Sources and Uses of Funds
	3-8	Contribution Rates
	9	Projection
	10-11	Unfunded Accrued Liabilities
	12	Short Condition Test
B		Benefit Provisions and Valuation Data
	1-3	Benefit Summary
	4	Data Summary
	5-13	Active & Inactive Members
	14-16	Retirees and Beneficiaries
	17	Comparative Summary
C	1-3	Financial Data
D	1-10	Actuarial Methods and Assumptions
E		Financial Principles
	1-2	Operational Techniques
	3-4	The Valuation Process
	5-7	Glossary



GABRIEL, ROEDER, SMITH & COMPANY

Consultants & Actuaries

One Towne Square • Suite 800 • Southfield, Michigan 48076 • 248-799-9000 • 800-521-0498 • fax 248-799-9020

April 15, 2005

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

Ladies and Gentlemen:

The results of the **December 31, 2004 annual actuarial valuations of members** covered by the Illinois Municipal Retirement Fund 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 2006 calendar year.

The valuations are based upon current plan provisions related to Regular Members, Sheriff's Law Enforcement Personnel (SLEP), and Elected County Officials (ECO) employment. All promised benefits are included in the actuarially calculated contribution rates. These provisions are summarized in Section B.

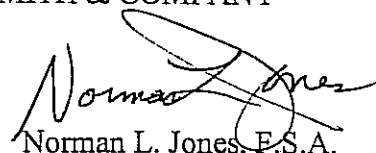
IMRF staff furnished the individual member statistical data required for the valuations, together with pertinent data on financial operations. Their cooperation in furnishing these materials is acknowledged with appreciation.

The actuarial assumptions used in the valuations are summarized in Section D of this report. The Board of Trustees establishes the assumptions after consulting with the actuary. They are internally consistent and are based on the results of the Triennial Experience Study covering 1999-2001 experience.

The valuations were completed by qualified actuaries in accordance with accepted actuarial procedures prescribed by the Actuarial Standards Board. The qualified actuaries are members of the American Academy of Actuaries and are experienced in performing actuarial valuations of public employee retirement systems. To the best of our knowledge this report is complete and accurate and the actuarial methods and assumptions produced results that are reasonable. It is our opinion that the Illinois Municipal Retirement Fund is in sound condition in accordance with actuarial principles of level percent of payroll financing.

Respectfully submitted,
GABRIEL, ROEDER, SMITH & COMPANY


Brian B. Murphy, F.S.A.


Norman L. Jones, F.S.A.

NLJ/lr

INTRODUCTION

IMRF is established under statutes adopted by the Illinois General Assembly. It is a multiple employer defined benefit pension plan that, as of December 31, 2004, serves 3,172 active plans and 336,861 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 6.5%; 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 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 each employer.
- **Contributions for lump sum death-in-service benefits**, which are separately determined for each employer.
- **Contributions for temporary disability benefits**, which are the same for each employer.
- **Contributions for 13th checks**, which are 0.62% of covered payroll for each employer.
- **Contributions for ERI unfunded liabilities** which are separately determined for each employer.
- **Contributions for other unfunded liabilities**, which are separately determined for each employer. For most employers with taxing authority, unfunded liabilities are being funded over 26 remaining years. For most other employers the remaining period is 5 years. A separate schedule applies to each year's new employers. The amortization policy is described on page D-9.

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
This Valuation	10.04%	18.25%	44.90%
Prior Valuation	9.25%	17.15%	42.66%

This year's valuation results were affected by:

- The continuing phase-in of investment losses that occurred from 2000 to 2002. The investment loss is shown on page C-1 and is a result of the asset recognition method that phases in gains and losses over a five-year period.
- Increases in the covered population.
- ERI liabilities.
- A Board approved change in the method for calculating the Funding Value of Assets. The change reduces the volatility in the asset calculation.

Although investment results were favorable during 2004, the valuation shows that IMRF (in total) continues to have an unfunded liability (please see page A-11).

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

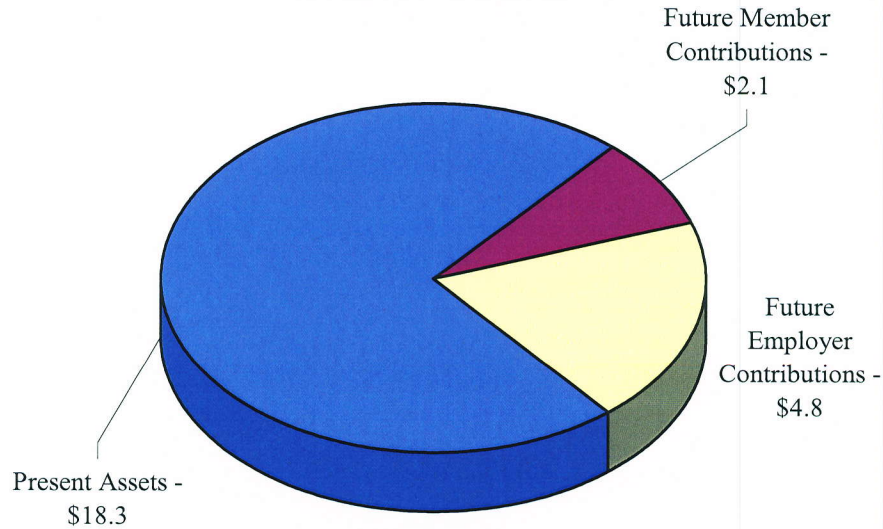
SECTION A



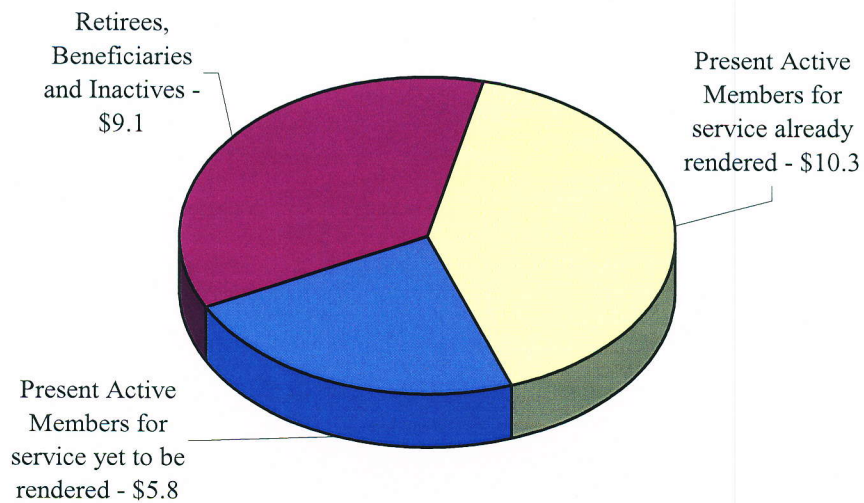
Valuation Results

**FINANCING \$25.2 BILLION WORTH OF BENEFIT PROMISES
TO PRESENT MEMBERS, RETIREES AND BENEFICIARIES
DECEMBER 31, 2004
(AMOUNTS IN \$BILLIONS)**

Sources of Funds



IMRF Obligations



ACTUARIAL BALANCE SHEET
DECEMBER 31, 2004

Funding Sources

	Regular	SLEP	ECO	Total
Present Valuation Assets				
Member Contributions	\$ 3,263,304,423	\$ 189,310,433	\$ 18,346,914	\$ 3,470,961,770
Employer Assets	7,157,793,778	354,780,638	14,219,194	7,526,793,610
Retired Life Assets	6,775,766,071	475,131,592	81,644,677	7,332,542,340
Market Value Adjustment	(26,916,140)	(1,589,573)	(164,468)	(28,670,181)
Death and Disability Reserves				14,360,371
Total Present Assets	17,169,948,132	1,017,633,090	114,046,317	18,315,987,910
Future Assets				
Member Contributions	1,980,264,566	131,828,652	9,353,089	2,121,446,307
Employer Contributions				
Normal Costs	3,362,049,062	254,733,533	22,459,892	3,639,242,487
Unfunded Liability	836,136,715	163,628,571	108,913,820	1,108,679,106
Total Employer	4,198,185,777	418,362,104	131,373,712	4,747,921,593
Total Future Assets	6,178,450,343	550,190,756	140,726,801	6,869,367,900
Total Funding Sources	\$23,348,398,475	\$1,567,823,846	\$ 254,773,118	\$25,185,355,810

Funding Uses

Funds Needed for	Regular	SLEP	ECO	Total
Active Members	\$ 14,859,092,161	\$ 1,040,672,249	\$ 151,498,122	\$ 16,051,262,532
Inactive Members	1,713,540,243	52,020,005	21,630,319	1,787,190,567
Retirees and Beneficiaries	6,775,766,071	475,131,592	81,644,677	7,332,542,340
Death and Disability Benefits				14,360,371
Total Actuarial Present Value	\$23,348,398,475	\$1,567,823,846	\$ 254,773,118	\$25,185,355,810

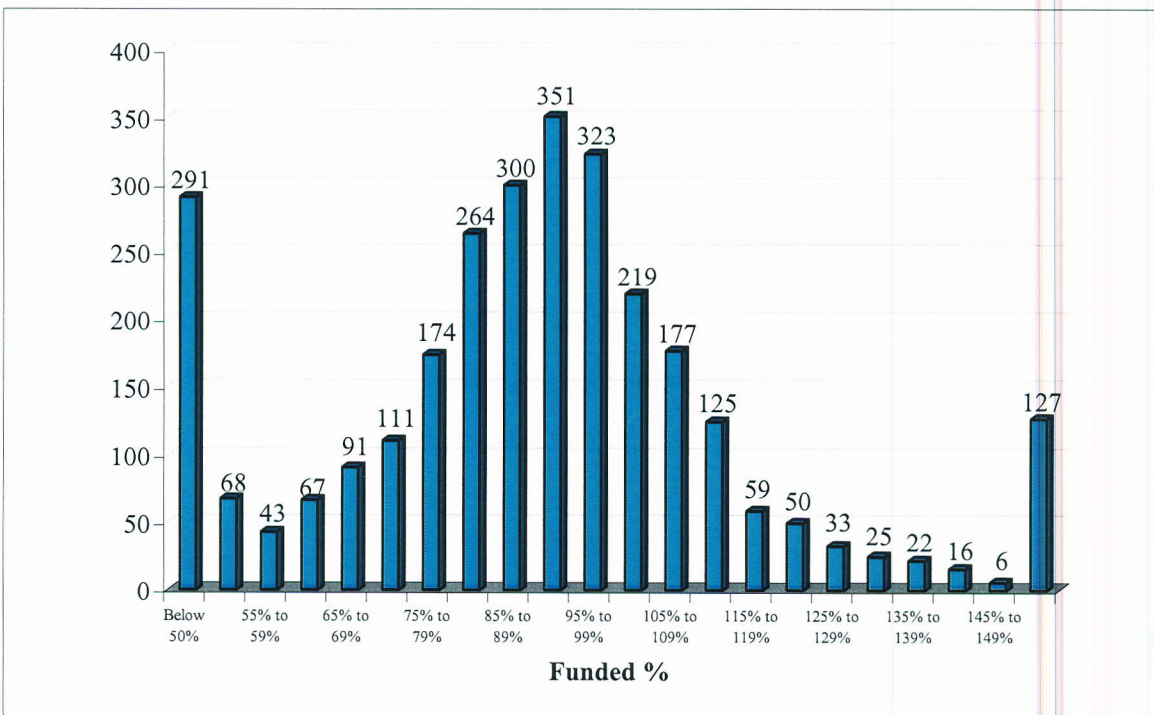
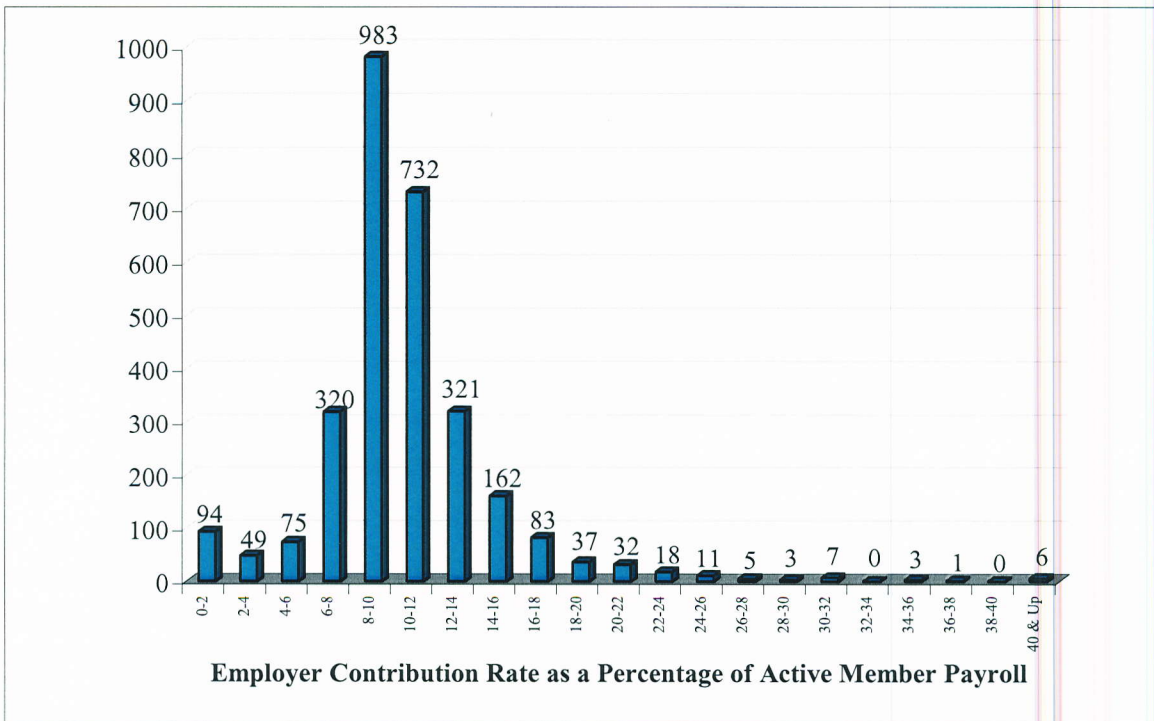
**DEVELOPMENT OF AVERAGE CONTRIBUTION RATES
APPLICABLE TO CALENDAR YEAR 2006
(RESULTS AS OF DECEMBER 31, 2004)**

	% of Active Member Pays		
	Regular	SLEP	ECO
Average Employer Contributions for			
Normal Cost	7.64 %	12.56 %	18.01 %
Lump Sum Death-in-Service Benefits	0.23 %	0.24 %	0.22 %
Temporary Disability	0.21 %	0.21 %	0.21 %
13th Checks	0.62 %	0.62 %	0.62 %
Unfunded (Overfunded) Liabilities (26/5 years)	0.98 %	4.35 %	25.81 %
Early Retirement Incentive Liabilities	0.36 %	0.27 %	0.03 %
Total Average Employer Rate	10.04 %	18.25 %	44.90 %
Prior Year Averages	9.25 %	17.15 %	42.66 %

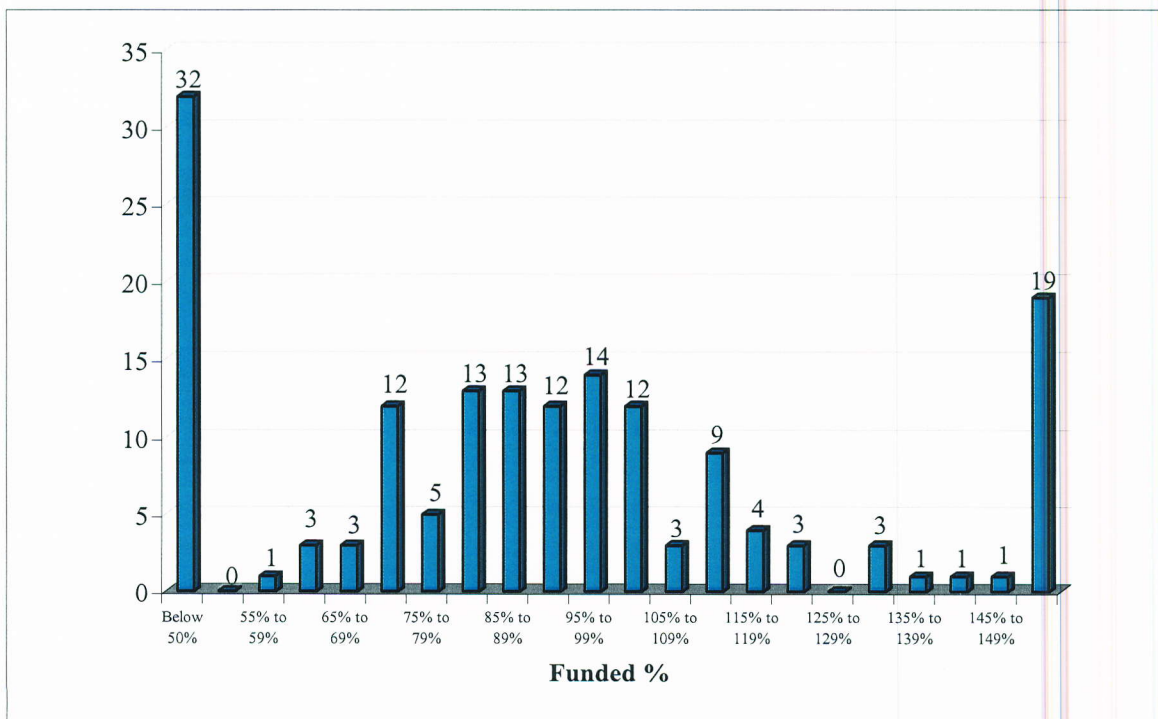
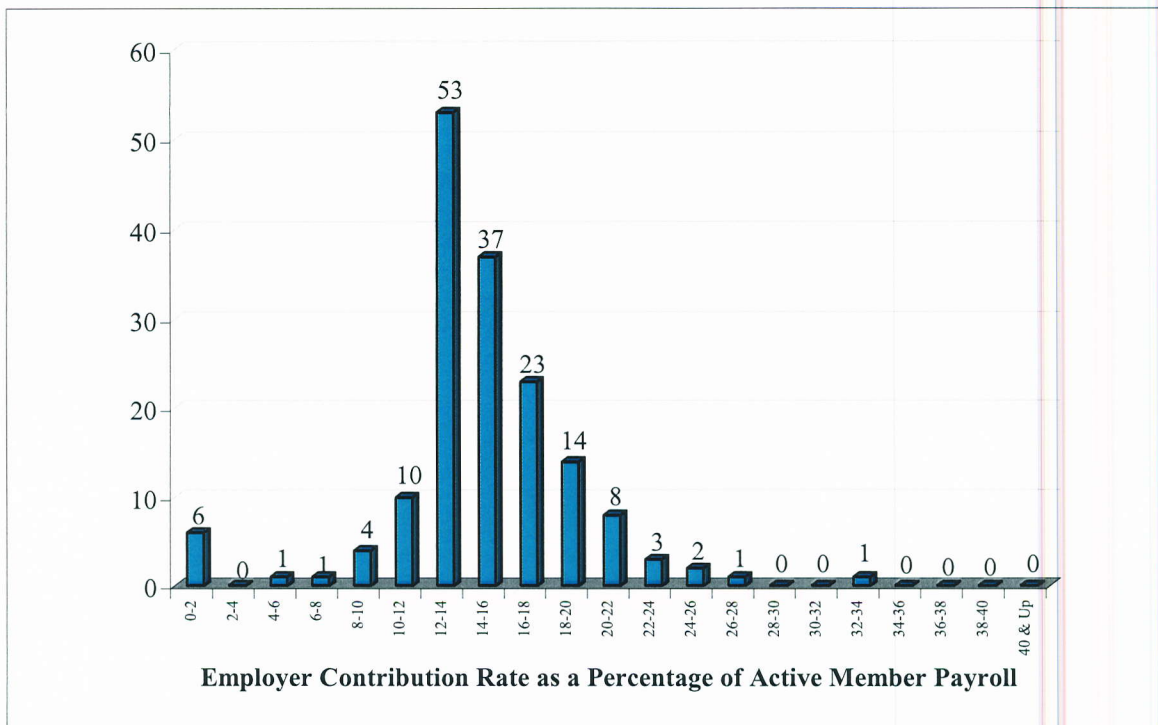
Each participating employer pays the same normal cost rate and the same rate for temporary disability benefits and 13th checks. Rates for lump sum death-in-service benefits, unfunded (overfunded) liabilities, and early retirement incentive liabilities are separately determined for each employer, and 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 from the prior year among the 2,942 Regular plans, 164 SLEP plans and 66 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. While most contribution rates are near the average, some employer rates are below 2% and some are over 40% of payroll.

Employer contributions made during calendar year 2004 amounted to \$456 million, which was approximately 106% of the amount that had been computed in the 2002 valuation. In particular, for each of the last three years actual contributions have been at least 95% of the actuarially computed rates.

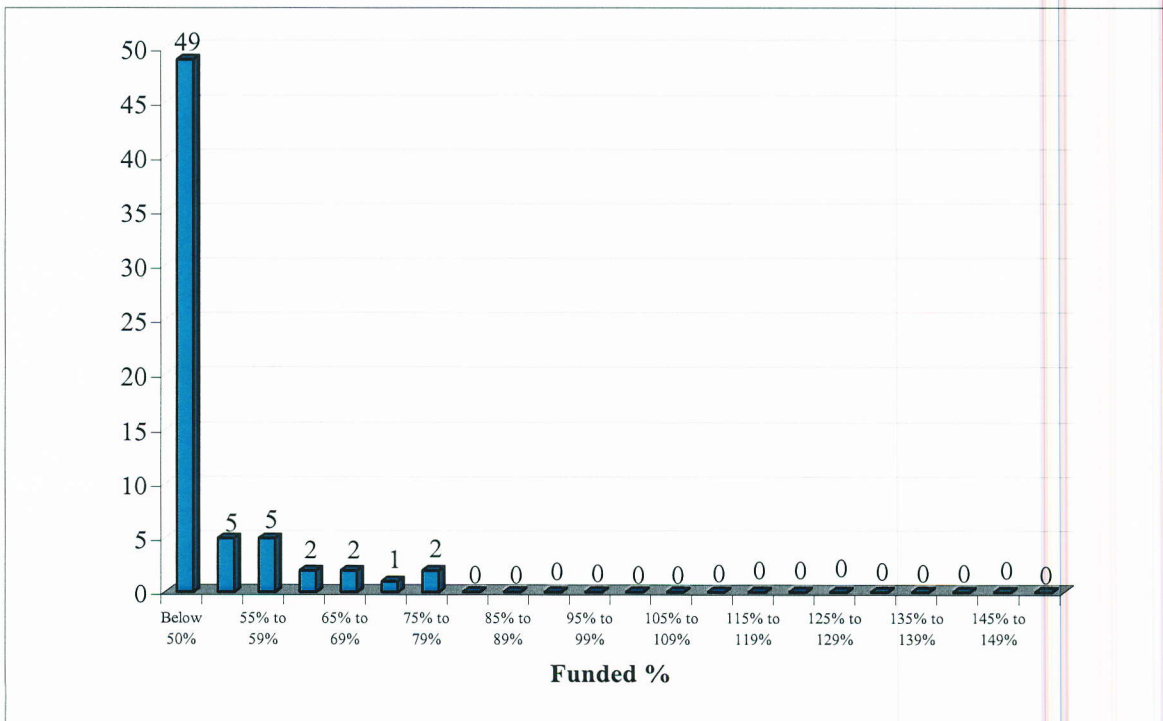
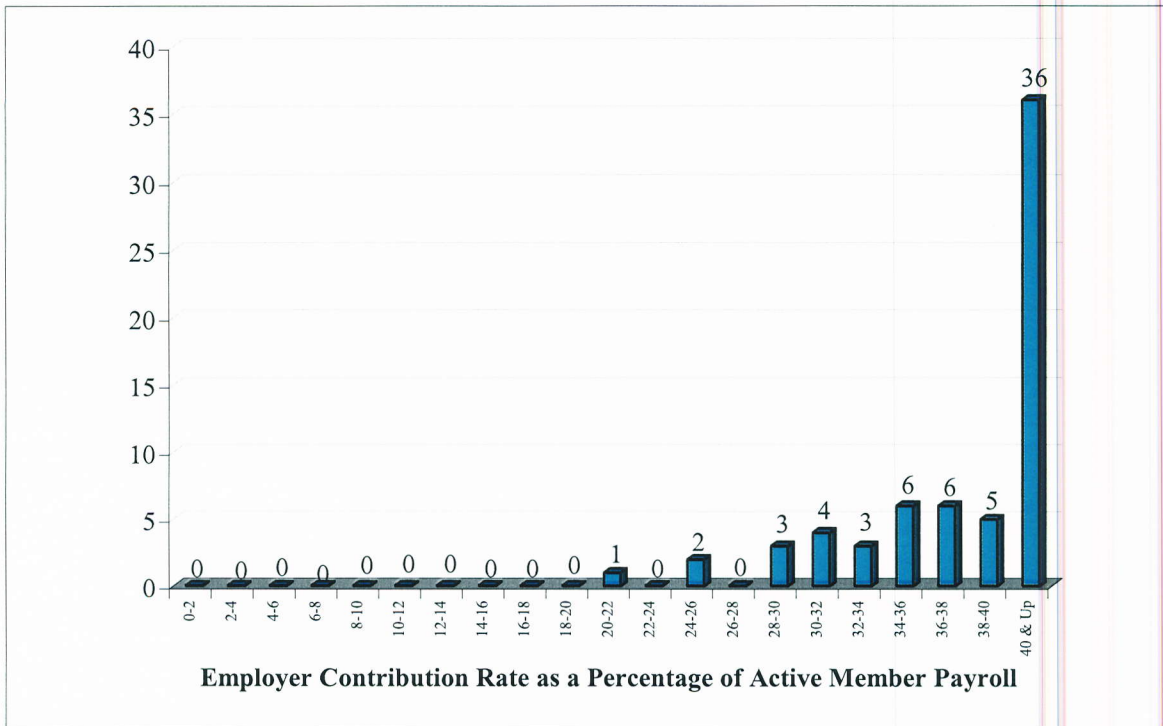
EMPLOYER CONTRIBUTION RATES AND FUNDED PERCENTS 2,942 REGULAR EMPLOYERS AT DECEMBER 31, 2004



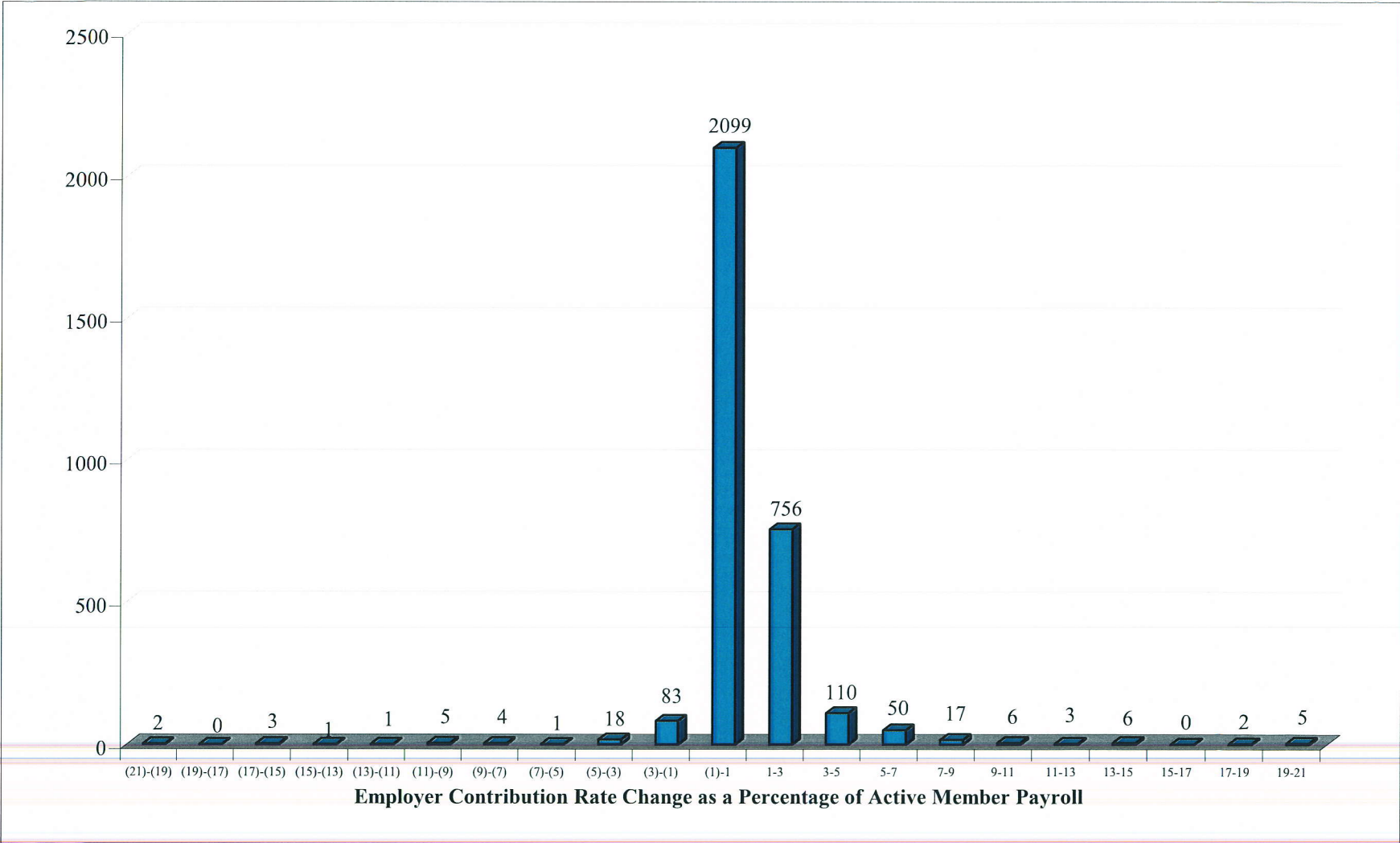
EMPLOYER CONTRIBUTION RATES AND FUNDED PERCENTS 164 SLEP EMPLOYERS AT DECEMBER 31, 2004



EMPLOYER CONTRIBUTION RATES AND FUNDED PERCENTS 66 ECO EMPLOYERS AT DECEMBER 31, 2004



EMPLOYER CONTRIBUTION RATE CHANGES - 2004 ACTUARIAL VALUATIONS
3,172 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		SLEP Members		ECO Members	
		Normal Cost	Average Total Rate	Normal Cost	Average Total Rate	Normal Cost	Average Total Rate
1983	1981*	2.88%	6.58%	3.56%	6.20%		
1984	1982	2.97%	6.55%	3.90%	6.22%		
1985	1983	3.57%	7.35%	4.92%	7.03%		
1986	1984*	2.59%	7.52%	3.93%	6.46%		
1987	1985	2.61%	7.34%	4.28%	6.66%		
1988	1986	2.51%	7.29%	4.40%	7.11%		
1989	1987*#	6.94%	12.17%	7.93%	13.01%		
1990	1988	6.94%	11.79%	7.90%	12.53%		
1991	1989	6.94%	11.60%	7.88%	12.02%		
1992	1990*	8.24%	11.89%	10.31%	14.01%		
1993	1991*#	7.04%	10.58%	8.49%	12.01%		
1994	1992	7.33%	10.77%	8.87%	11.82%		
1995	1993*	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*	7.21%	9.64%	10.22%	13.94%		
1999	1997!	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*	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*	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%

* Assumption change.

Benefit change

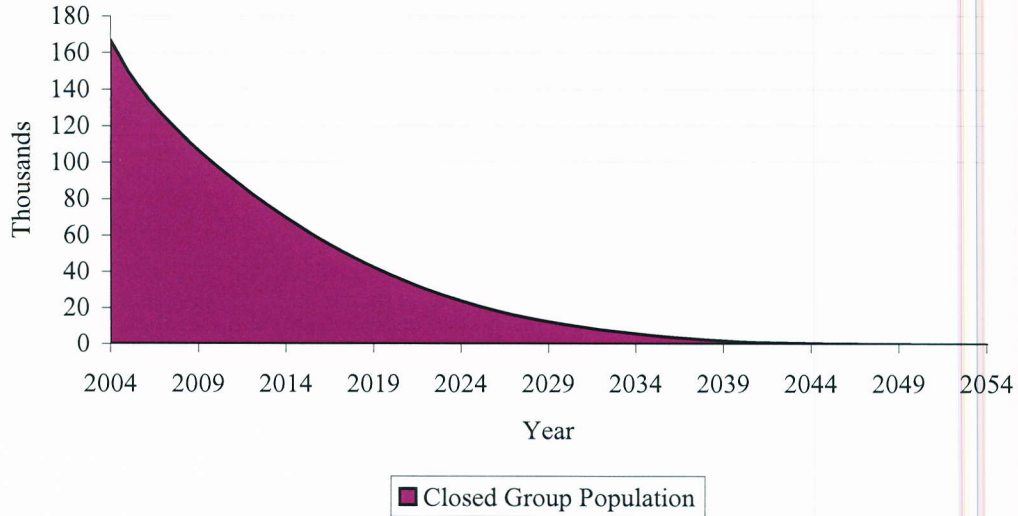
As shown above, the average employer contribution rates increased this year for all employers. The rate increases are primarily due to the gradual recognition of investment losses under the asset valuation method. Generally, small fluctuations from year to year should be expected, for the average rate and for any large employer's rate. Small and very small employers will experience larger variations.

Four percent of employers experienced a rate decrease of more than 1% of payroll. Sixty-six percent of employers experienced either a change (up or down) of less than 1% of payroll. Thirty percent of employers experienced a rate increase of greater than 1%. Of those, the majority were in the 1% to 3% increase range (please see page A-7).

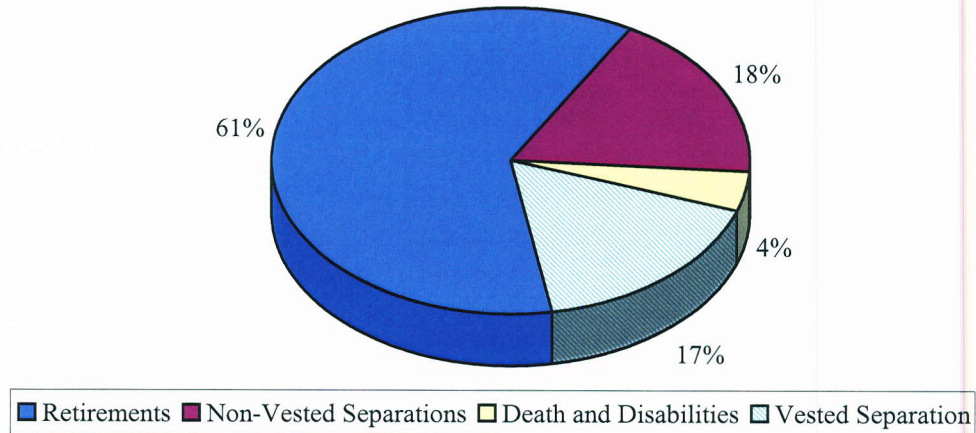
Most of the larger changes were for small employers (often employers covering only 1 or 2 employees), since the removal or addition of 1 employee can significantly impact the contribution rate. The actuary and IMRF staff review all of the large rate changes individually in order to determine the reasonableness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

EXPECTED DEVELOPMENT OF PRESENT POPULATION DECEMBER 31, 2004

Closed Group Population Projection



Expected Terminations from Active Employment For Current Active Members



The charts show the expected future development of the present population in simplified terms. The retirement system presently covers 167,030 active members. Eventually, 18% of the population is expected to terminate covered employment prior to retirement and forfeit eligibility for a monthly benefit. About 78% 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. Four 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. However, this year, the phase-in of investment losses has caused unfunded liabilities to increase both in dollar amount, and in percent of payroll. The schedule below illustrates the development of the unfunded liability, based upon actuarial value of assets, during the year.

	Unfunded Liability Development During	
	2004	2003
Unfunded (Overfunded) Liability January 1	\$ 436,212,633	\$(240,288,202)
Assumed Net (Payments) Credits	(41,532,338)	41,586,144
Assumed Interest	31,177,228	(16,480,934)
Expected Unfunded Liability December 31	425,857,523	(215,182,992)
Increase/(Decrease) Due to Experience Study	0	0
Loss/(Gain) Due to Investment Experience	478,548,470	404,569,684
Loss/(Gain) Due to Other Sources	204,273,113	246,825,941
Actual Unfunded Liability December 31	\$1,108,679,106	\$436,212,633

Changes due to other sources included the effect of differences between actual and assumed experience and the effect of new employers joining IMRF. These matters are discussed more completely in the separate Gain and Loss Analysis report.

**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)
1983	\$ 2,780,217,771	\$ 1,821,146,853	\$ 959,070,918	\$1,487,069,292	65.5%	64.5%
1984*	3,261,944,379	1,944,694,044	1,317,250,335	1,551,980,698	59.6%	84.9%
1985	3,609,515,653	2,248,747,268	1,360,768,385	1,660,500,587	62.3%	81.9%
1986	3,958,462,273	2,487,488,403	1,470,973,870	1,768,254,219	62.8%	83.2%
1987*#	4,516,366,654	2,757,918,614	1,758,448,040	1,869,513,284	61.1%	94.1%
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%

* 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%. Due to the phase-in of investment losses during the last five years, these ratios have temporarily moved away from these targets.

SHORT CONDITION TEST

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

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

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

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

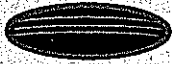
Short Condition Test

Calendar Year	Aggregate Actuarial Liabilities For			Actuarial Assets	Portion of Actuarial Liabilities covered by Assets		
	(1)	(2)	(3)		(1)	(2)	(3)
	Non-Retired Contributions	Annuitants	Non-Retired Members (Employer Financed Portion)				
1990*	\$ 986,213,859	\$ 2,111,742,303	\$3,134,267,510	\$ 4,468,795,967	100%	100%	43.7%
1991*#	1,095,888,522	2,217,253,547	3,093,823,381	5,034,577,441	100%	100%	55.6%
1992	1,218,238,446	2,421,564,751	3,314,680,161	5,615,583,858	100%	100%	59.6%
1993*	1,350,831,396	2,660,823,087	3,498,111,756	6,396,329,900	100%	100%	68.2%
1994	1,496,014,554	2,907,982,455	3,722,645,821	7,078,861,925	100%	100%	71.9%
1995	1,642,362,193	3,171,162,151	4,010,173,143	8,034,030,783	100%	100%	80.3%
1996*	1,782,293,677	3,588,320,471	4,407,978,361	9,076,261,663	100%	100%	84.1%
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%

* Assumption change.

Benefit change.

SECTION B



Summary of Benefit Provisions and Valuation Data

SUMMARY OF BENEFITS AND CONDITIONS EVALUATED

DECEMBER 31, 2004

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). 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. Elected officials and hospital employees who satisfy requirements may also participate.

Final Rate of Earnings (FRE).

Retirement and Survivor Annuities: Regular and SLEP Members: The average of earnings during the 48 consecutive month period within the last 10 years of IMRF service in which earnings were the highest. Earnings considered for each of the last 3 months cannot exceed the highest earnings in any of the first 45 months by more than 25%. Minimum FRE is \$125 per month. **ECO Members:** Original ECO Plan: Salary rate at date of termination or retirement. Revised Plan: Average of last four years for each office held.

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

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

Normal Retirement Pension Eligibility.

Regular Members: Age 60 with 8 or more years of service or 35 or more years of service and age 55 or greater.

SLEP Members: Age 50 with 20 or more years of SLEP service.

ECO Regular Members: Age 55 with 8 or more years of service.

ECO SLEP Members: Age 50 with 20 or more years of SLEP service or age 55 with 8 or more years of any service.

Normal Retirement Pension Amount.

Regular Members: 1-2/3% of FRE times each of the first 15 years of service, plus 2% of FRE times service over 15 years.

SLEP Optional Formula: 2-1/2% of FRE times each of the first 20 years of SLEP service, plus 2% of FRE times service over 20, but less than 30 years, plus 1% of FRE times service over 30 years.

Maximum Formula Pension: 75% of FRE.

ECO Members: 3% of FRE times each of the first 8 years of service, plus 4% of FRE times each of the next 4 years of service, plus 5% of FRE times service over 12 years. For original ECO participants, one day of ECO service is required to qualify for this formula. For participants in the Revised Plan, 8 years of service credit per office is required to qualify for the ECO formula for that office.

Maximum ECO Formula Pension: 80% of FRE.

Money Purchase Minimum Pension: The amount that may be purchased by 2.4 times the member's accumulated contributions, including interest at 7.5%.

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

Eligibility: Attainment of age 55 with 8 or more years of service.

Amount: Normal pension amount reduced by 1/4% times the lesser of (i) the number of months to the member's attainment of age 60, or (ii) the number of months actual service is less than 35 years.

Money Purchase Minimum Pension: Same as normal retirement (see above).

SUMMARY OF BENEFITS AND CONDITIONS EVALUATED
DECEMBER 31, 2004
(CONTINUED)

Vesting.

A member with 8 or more years of service who leaves employment before being eligible for an immediate pension who does not withdraw accumulated contributions will be entitled to a deferred pension at pension eligibility. The amount of the pension will be based on service and FRE at time of employment termination, but will include the effect, if any, of the money purchase minimum pension. (These provisions apply to both ECO and non-ECO members.)

Surviving Spouse Pension.

Regular and SLEP

Eligibility: Married for one year prior to death of an active member or date of termination of service for a retiree or inactive member with 8 or more years of service.

Amount: 50% of the pension otherwise payable to the deceased member. If spouse is more than 5 years younger than the deceased member, the pension is actuarially reduced. In addition to this monthly amount, a lump sum benefit of \$3,000 is payable.

ECO

Eligibility: Married for one year prior to death of an active member or date of termination of service for a retiree or inactive member with 8 or more years of service.

Amount: 66 2/3% of the pension otherwise payable to the deceased member, beginning at age 50 (immediately if there are minor children).

Minimum: 10% of salary (30% with one minor child, 40% with two minor children, and 50% with three minor children).

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

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 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 beneficiary.

Amount: Equal to spouse 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.

SUMMARY OF BENEFITS AND CONDITIONS EVALUATED
DECEMBER 31, 2004
(CONCLUDED)

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.

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) age 60, 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.

Pensions are increased by 3% of their original amount on January 1 each year. The first increase is prorated by the number of months of retirement. Disability pensions are not increased until the January 1st following 30 months of disability. These provisions apply to both ECO and non-ECO members.

13th Check.

A lump sum payment is made to 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 check 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: 6 1/2% of earnings (5-3/4% base plus 3/4% for survivor benefits).

Additional: Up to 10% of earnings.

ECO Members: (a) Past service: Regular members pay an additional 3% of the salary for the applicable period plus interest from the date of service to the payment date. SLEP members pay an additional 1% of salary for the applicable period plus interest from the date of service to the payment date. (The total rate is 7 1/2% for each past year purchased plus interest.)

(b) Future service: 7 1/2% of earnings during the period of elective participant. (Note: Continued classification as an ECO member is not a condition for continued elective participation in the ECO program for participants in the original ECO Plan.)

Refunds: If membership terminates without eligibility for any other benefit, a refund of base and survivor contributions without interest plus accumulated additional contributions with interest is payable. Upon retirement of a member who does not have an eligible spouse, survivor benefit contributions are refunded.

**SUMMARY OF COVERED POPULATION DATA
DECEMBER 31, 2004**

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

Member Status	No.	Valuation Payroll / Benefits	Average		
			Pay / Benefits	Age	Service
Active Members					
Regular	162,561	\$4,936,953,287	\$30,370	46.1	8.9
SLEP	3,901	200,918,707	51,504	40.4	11.2
ECO	568	23,255,438	40,943	54.1	11.4
Total Active	167,030	\$5,161,127,432	\$30,899	46.0	9.0
Inactive Members					
Regular	151,158			45.9	4.5
SLEP	966			43.7	9.2
ECO	148			52.9	10.3
(Inactive and Active)	(30,729)				
Total Inactive	121,543			45.9	4.5
Retirees & Beneficiaries	79,017	\$ 691,697,124	\$ 8,754	72.8	
Total Population	367,590				
Prior Year Total	361,010				

There are a number of situations where members are counted more than once. Actual counts may be lower than the numbers shown above.

Additional population statistics are presented on the following pages.

ACTIVE MEMBERS BY EMPLOYER TYPE
DECEMBER 31, 2004
REGULAR, SLEP, ECO COMBINED

Type of Employer	Rate Groups	Members			Payroll
		Number	% of Total	Cumulative Percent	
School Districts	878	74,642	44.8%	44.8%	\$ 1,703,116,216
Counties (Regular, SLEP,ECO)	268	31,948	19.1%	63.9%	1,145,127,610
Cities	283	20,429	12.2%	76.1%	843,947,037
Villages	420	15,185	9.1%	85.2%	679,963,494
Park Districts	194	6,808	4.1%	89.3%	229,424,275
Special Ed Districts	39	4,347	2.6%	91.9%	97,245,306
Townships	477	3,580	2.1%	94.0%	106,970,317
Library Districts	200	2,672	1.6%	95.6%	71,261,027
Forest Preserve Districts	13	948	0.6%	96.2%	37,365,173
Sanitary Districts	38	920	0.6%	96.8%	44,860,627
Consolidated Education Service Region	29	713	0.4%	97.2%	16,602,031
County Hospital Districts	3	537	0.3%	97.5%	17,359,547
Towns	5	508	0.3%	97.8%	21,709,409
Mass Transit District (Taxing Authority)	4	482	0.3%	98.1%	18,312,653
Intergovernmental Coop	41	472	0.3%	98.4%	23,010,034
Misc. Taxing Authority	7	266	0.2%	98.6%	13,036,210
Public Library System	8	255	0.2%	98.8%	9,140,966
Airport Authorities	11	245	0.1%	98.9%	10,923,030
Multi Co/Cons Health Dept.	4	235	0.1%	99.0%	6,589,886
Health Districts	4	221	0.1%	99.1%	7,355,953
Vocational System	40	167	0.1%	99.2%	4,532,416
Fire Protection Districts	37	164	0.1%	99.3%	7,452,207
Mass Transit Instrumentality	3	162	0.1%	99.4%	5,368,498
County Conservation Districts	4	120	0.1%	99.5%	4,011,072
Public Hopusing Authority	7	119	0.1%	99.6%	3,957,150
Miscellaneous Instrumentality	12	114	0.1%	99.7%	5,348,878
Joint Spec Rec Assns	10	106	0.1%	99.8%	3,994,215
Conservancy Districts	4	99	0.1%	99.9%	2,953,733
Joint Education Projects	8	89	0.1%	100.0%	2,071,698
Public Housing Commission	7	67	0.0%	100.0%	2,354,310
County Road District	37	65	0.0%	100.0%	1,451,175
Special Ed Coop/Districts	20	65	0.0%	100.0%	3,405,832
Tuberculosis Sanitarium Districts	1	54	0.0%	100.0%	2,350,321
Water District	10	44	0.0%	100.0%	1,716,445
Regional Planning Commission	1	37	0.0%	100.0%	2,004,195
Mosquito Abatement District	7	36	0.0%	100.0%	1,641,047
Educ Serv Centers	3	30	0.0%	100.0%	767,224
Water Supply/Sewr Comission	5	30	0.0%	100.0%	1,344,066
ROE Office	1	18	0.0%	100.0%	467,550
Township Cemetary	14	16	0.0%	100.0%	282,853
Multi Twp Assessment Districts	13	12	0.0%	100.0%	202,643
Drainage District	2	3	0.0%	100.0%	129,103
Employers with no Active Members	234	0	0.0%	100.0%	-
Totals	3,406	167,030	100.0%	100.0%	\$ 5,161,127,432

**ACTIVE REGULAR MEMBERS
BY ATTAINED AGE AND YEARS OF SERVICE
DECEMBER 31, 2004**

Attained Ages	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	No.	Valuation Payroll
15-19	358							358	\$ 3,846,207
20-24	5,456	108						5,564	111,697,027
25-29	8,669	1,872	31					10,572	287,247,511
30-34	7,016	3,752	972	68				11,808	365,869,384
35-39	8,138	4,175	2,238	1,080	51			15,682	486,716,222
40-44	10,623	6,218	2,987	2,627	1,169	135		23,759	714,960,481
45-49	9,854	7,927	4,365	3,002	2,191	1,652	101	29,092	909,971,651
50	1,617	1,459	968	691	409	376	120	5,640	183,301,808
51	1,565	1,414	962	714	383	377	137	5,552	178,533,939
52	1,442	1,290	987	695	367	336	172	5,289	171,597,594
53	1,427	1,163	989	813	400	337	210	5,339	175,224,232
54	1,259	1,100	921	757	424	316	266	5,043	165,098,115
55	1,146	1,007	868	738	407	299	217	4,682	156,032,006
56	1,089	870	795	755	393	273	198	4,373	141,658,238
57	966	895	712	714	380	267	159	4,093	132,606,082
58	1,009	887	726	804	426	265	174	4,291	137,883,883
59	720	549	498	512	343	202	116	2,940	92,835,786
60	669	548	460	470	305	214	107	2,773	87,098,871
61	651	553	432	500	293	173	94	2,696	82,992,978
62	577	539	439	461	302	204	109	2,631	80,255,592
63	408	449	298	331	220	154	74	1,934	58,018,305
64	351	335	257	255	178	128	54	1,558	45,425,597
65	304	265	225	185	133	101	67	1,280	36,777,776
66	242	232	155	127	97	70	53	976	26,731,102
67	202	186	135	118	64	68	47	820	20,951,954
68	179	170	93	87	75	32	41	677	16,197,971
69	174	125	105	73	32	35	25	569	13,629,429
70	113	106	91	63	31	24	25	453	10,206,734
Over 70	476	483	370	303	188	147	150	2,117	43,586,812
Totals	66,700	38,677	22,079	16,943	9,261	6,185	2,716	162,561	\$4,936,953,287

**ACTIVE SLEP MEMBERS
BY ATTAINED AGE AND YEARS OF SERVICE
DECEMBER 31, 2004**

Attained Ages	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	No.	Valuation Payroll
15-19									
20-24	104							104	\$ 3,517,044
25-29	339	81	1					421	16,707,883
30-34	267	345	71	1				684	31,363,976
35-39	169	222	228	104	1			724	37,427,223
40-44	89	117	157	237	45	2		647	35,308,425
45-49	44	66	85	150	137	91		573	33,403,668
50	8	5	12	29	17	31		102	6,482,695
51	8	11	7	21	16	29	3	95	5,664,371
52	12	10	10	21	17	20	4	94	5,674,208
53	5	10	11	12	8	12	11	69	4,040,840
54	10	5	10	18	17	14	10	84	4,895,694
55	5	3	8	9	13	8	2	48	2,650,609
56	6	5	10	9	7	8	4	49	2,693,470
57	7	4	4	11	8	5	3	42	2,319,366
58	7	6	7	4	6	6	9	45	2,524,360
59	2	2	3	5	1	2	3	18	1,199,252
60	4	5	3	3		1	3	19	1,016,814
61	3	3	4	3	3	1		17	896,033
62	2	3	2	2	2	2	3	16	705,290
63	3		2	1	3	1		10	511,792
64		1	1	5	2	1	1	11	647,086
65	1	2	2	1		1	1	8	390,333
66			2	1				3	182,669
67		1	1	2	2		1	7	298,631
68			1	2				3	160,446
69		1	1					2	59,352
70									
Over 70		2		2	1	1		6	177,177
Totals	1,095	910	643	653	306	236	58	3,901	\$200,918,707

**ACTIVE ECO REGULAR MEMBERS
BY ATTAINED AGE AND YEARS OF SERVICE
DECEMBER 31, 2004**

Attained Ages	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	No.	Valuation Payroll
20-24									
25-29	2							2	\$ 62,235
30-34	4	1	1					6	165,076
35-39	17	6	5					28	1,565,107
40-44	19	6	7	6	3	2		43	1,865,237
45-49	30	26	14	11	8	7		96	4,649,559
50	3	3	5	2	6	2	2	23	1,273,082
51	9	3	1	7	2	3	1	26	1,259,326
52	6	1	7	3	2	2	1	22	1,137,850
53	3	4	3	3	2			15	682,911
54	7	1	3	3	2			16	542,439
55	5	5	4	3	2		1	20	850,201
56	7	7	5	1	2	2	1	25	731,367
57	5	5	5	4	1	1		21	748,554
58	6	4	2	3	2	1	1	19	768,044
59	5	2	2		1		1	11	395,658
60	1	1	5	2	2	1		12	462,168
61	5	1	2	5				13	544,288
62	5	2		2				9	203,993
63	3		2		1	2	3	11	464,049
64	2	6	1	2				11	279,619
65	5	3	1	1			1	11	244,479
66	2	1	3	1	3		1	11	248,855
67	2	3	2	1				8	102,742
68	4	2	1		1			8	107,056
69	3						1	4	132,981
70	1	3	2	3	1	1	1	12	157,208
Over 70	7	13	6	4	5		2	37	588,678
Totals	168	109	89	67	46	24	17	520	\$20,232,762

**ACTIVE ECO SLEP MEMBERS
BY ATTAINED AGE AND YEARS OF SERVICE
DECEMBER 31, 2004**

Attained Ages	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	No.	Valuation Payroll
30-34									
35-39			1					1	\$ 66,842
40-44	5		2	1				8	430,455
45-49	3	1	1		1		1	7	377,722
50				1	1			2	122,965
51				1	1	1		3	185,755
52			1			1		2	124,242
53									
54	1			2			3	6	447,435
55	1							1	106,905
56			3					3	171,146
57		1					1	2	135,019
58		3			1			4	208,617
59							1	1	94,401
60	1					1		2	141,522
61							1	1	53,894
62		1						1	62,074
63	1		1					2	124,359
64							1	1	84,861
65									
66									
67									
68									
69									
70									
Over 70					1			1	84,462
Totals	12	6	9	5	5	3	8	48	\$3,022,676

**ALL ACTIVE MEMBERS BY YEARS OF SERVICE AND GENDER
DECEMBER 31, 2004**

Service Years	Active Member Count			Active Member Pays	
	Males	Females	Total	Total	Average
0	5,761	11,717	17,478	\$ 341,544,264	\$ 19,541
1	4,819	8,622	13,441	300,281,711	22,341
2	4,399	8,055	12,454	305,505,491	24,531
3	4,373	8,672	13,045	331,219,677	25,391
4	3,832	7,725	11,557	314,212,946	27,188
5	3,510	6,981	10,491	294,019,736	28,026
6	2,956	5,930	8,886	255,997,590	28,809
7	2,686	5,075	7,761	229,411,868	29,560
8	2,264	4,385	6,649	208,184,569	31,311
9	2,043	3,872	5,915	185,813,941	31,414
10	1,818	3,573	5,391	177,416,449	32,910
11	1,667	2,983	4,650	158,215,779	34,025
12	1,411	2,506	3,917	138,519,188	35,364
13	1,589	2,668	4,257	152,775,037	35,888
14	1,720	2,885	4,605	172,626,464	37,487
15 & Up	17,346	19,187	36,533	1,595,382,722	43,670
Totals	62,194	104,836	167,030	\$5,161,127,432	\$30,899

**INACTIVE REGULAR MEMBERS
BY ATTAINED AGE AND YEARS OF SERVICE
DECEMBER 31, 2004**

Attained Ages	Years of Service to Valuation Date							Totals No.
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	
15-19	223							223
20-24	4,022	4						4,026
25-29	10,832	107						10,939
30-34	13,560	435	58				4	14,057
35-39	12,201	757	273	36		1	12	13,280
40-44	12,308	1,164	554	178	48	7	28	14,287
45-49	17,582	1,731	837	382	201	36	89	20,858
50	2,856	386	205	89	57	9	33	3,635
51	2,624	401	220	101	63	12	17	3,438
52	2,381	400	271	135	56	18	22	3,283
53	2,891	453	240	110	52	29	31	3,806
54	2,624	432	280	126	61	29	22	3,574
55	2,233	360	215	84	48	29	26	2,995
56	2,014	256	110	44	20	14	9	2,467
57	1,849	240	94	33	21	3	3	2,243
58	1,886	218	115	29	18	12	11	2,289
59	1,274	173	57	23	9	6	7	1,549
60	1,123	127	60	29	9	3	5	1,356
61	901	98	47	20	7	5	5	1,083
62	1,034	112	29	12	11	7	6	1,211
63	843	66	29	17	5	3	3	966
64	657	54	10	13	9	11	6	760
65	703	47	13	19	7	7	4	800
66	430	37	6	2	1			476
67	419	23	8	2	1		2	455
68	364	23	7	3			1	398
69	449	18	7	2	1			477
70	384	18	2	3	1			408
Over 70	5,251	177	41	12	3	3	8	5,495
Totals	105,918	8,317	3,788	1,504	709	244	354	120,834

**INACTIVE SLEP MEMBERS
BY ATTAINED AGE AND YEARS OF SERVICE
DECEMBER 31, 2004**

Attained Ages	Years of Service to Valuation Date							Totals No.
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	
15-19								
20-24	8							8
25-29	55							55
30-34	63	13	3					79
35-39	54	22	14	1			1	92
40-44	38	13	18	7	1	1	1	79
45-49	46	13	16	8	15	5	1	104
50	6	6	4	4	1			21
51	12	4	4	2	1			23
52	9	3	4	2	2			20
53	6	3	4	3	1		2	19
54	15	2	4	1	1			23
55	10	3	1			1		15
56	5		1	1		1	1	9
57	3	2	1					6
58	3				1			4
59	1		2					3
60	6				1			7
61	5	1		1				7
62	1							1
63		1						1
64	2		1					3
65	2							2
66	3							3
67	1						1	2
68								
69	2							2
70								
Over 70	8							8
Totals	364	86	77	30	24	8	7	596

**INACTIVE ECO MEMBERS
BY ATTAINED AGE AND YEARS OF SERVICE
DECEMBER 31, 2004**

Attained Ages	Years of Service to Valuation Date						Totals No.
	0-4	5-9	10-14	15-19	20-24	25-29	
15-19							
20-24							
25-29							
30-34	1						1
35-39	1	3					4
40-44	5	6	3		1		15
45-49	12	8	3	2		1	26
50	2	1	3				6
51		3	3	1			7
52	1	2	1	3	2		9
53	2	1	4	1	1		9
54	1		1	1	1		4
55	1		2				3
56	2	1		1			4
57	1		1				2
58				1			1
59	1						1
60	4			2			6
61			1				1
62			1				1
63			1		2		3
64	1	1					2
65		1					1
66							
67	1						1
68	1						1
69							
70							
Over 70	2	2	1				5
Totals	39	29	25	12	7	1	113

RETIREES AND BENEFICIARIES
DECEMBER 31, 2004

Annual Amounts by Form of Payment

Type of Retirement	Regular		Optional Plan		Total	
	No.	Amount	No.	Amount	No.	Amount
Normal or Early						
Joint and 50% Survivor	35,303	\$ 338,882,436	14,742	\$ 150,381,504	50,045	\$ 489,263,940
Straight Life	12,204	110,804,472	3,692	40,758,372	15,896	151,562,844
Total	47,507	449,686,908	18,434	191,139,876	65,941	640,826,784
Disability	601	3,539,400	-	-	601	3,539,400
Surviving Beneficiaries	10,913	42,735,612	652	4,056,576	11,565	46,792,188
Voluntary Contributions	910	538,752	-	-	910	538,752
Grand Total	59,931	\$ 496,500,672	19,086	\$ 195,196,452	79,017	\$ 691,697,124

Voluntary Contributions includes annuitization of certain surviving spouse and SLEP refund amounts. Thirteenth Check amounts are not included in the above figures.

**RETIREES AND BENEFICIARIES
BY ATTAINED AGE
DECEMBER 31, 2004**

Attained Ages	Number			Annual Benefits
	Males	Females	Total	
Under 20	3	5	8	\$ 12,672
20 - 24	7	9	16	43,644
25 - 29	1	4	5	13,920
30 - 34	9	7	16	71,712
35 - 39	7	18	25	87,960
40 - 44	21	42	63	295,308
45 - 49	50	106	156	817,104
50 - 54	567	274	841	23,157,648
55 - 59	2,277	3,580	5,857	88,958,928
60 - 64	3,291	7,116	10,407	122,280,804
65 - 69	4,402	9,366	13,768	134,571,024
70 - 74	4,437	9,116	13,553	118,991,760
75 - 79	4,353	8,948	13,301	96,337,092
80 - 84	3,444	7,704	11,148	66,345,252
85 - 89	1,749	4,807	6,556	29,242,308
90 - 94	652	2,029	2,681	8,896,812
95 & Up	107	509	616	1,573,176
Totals	25,377	53,640	79,017	\$691,697,124

**RETIREES AND BENEFICIARIES BY YEAR OF RETIREMENT
DECEMBER 31, 2004**

Year of Retirement	Number			Annual Benefits
	Males	Females	Total	
2004	1,886	3,221	5,107	\$ 67,384,248
2003	2,100	3,497	5,597	67,457,364
2002	1,745	3,188	4,933	54,018,840
2001	1,564	2,918	4,482	43,794,108
2000	1,327	2,768	4,095	39,915,180
1999	1,589	2,871	4,460	47,277,132
1998	1,567	2,811	4,378	50,267,928
1997	1,398	2,780	4,178	42,607,728
1996	1,195	2,622	3,817	37,870,368
1995	1,084	2,400	3,484	28,850,088
1994	978	2,192	3,170	25,968,552
1993	943	2,051	2,994	23,340,960
1992	869	1,844	2,713	21,100,416
1991	753	1,732	2,485	18,061,872
1990	775	1,676	2,451	17,586,108
1985 - 1989	3,122	7,323	10,445	66,235,536
1980 - 1984	1,652	4,288	5,940	28,608,264
1975 - 1979	682	2,312	2,994	9,101,460
1970 - 1974	133	878	1,011	1,982,268
1965 - 1969	13	201	214	207,528
Before 1965	2	67	69	61,176
Total	25,377	53,640	79,017	\$691,697,124

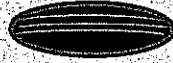
**DATA REPORTED FOR ACTUARIAL VALUATIONS
COMPARATIVE SUMMARY**

Date December 31	Total Count	Active Members					Number		Ratio: Act/Ret.
		Number	Average			Inactive	Retired		
			Age	Serv.	Annual Pay			Pay Increase	
1983	198,249	107,178	43.0	6.8	\$13,825	-	54,471	36,600	2.90
1984	183,483	105,658	43.1	7.2	14,689	6.2 %	38,762	39,063	2.70
1985	187,886	107,708	43.1	7.2	15,417	5.0 %	39,315	40,863	2.60
1986	193,006	110,285	43.1	7.3	16,033	4.0 %	39,921	42,800	2.60
1987	203,499	112,611	43.0	7.1	16,602	3.5 %	46,199	44,689	2.50
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

* 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	2003	2004	2005	2006	2007	2008
A. Funding Value Beginning of Year	\$ 16,800,195,506	\$ 17,529,890,818				
B. Market Value End of Year	16,349,040,059	18,315,987,910				
C. Market Value Beginning of Year	13,496,215,283	16,349,040,059				
D. Non-Investment/Administrative Net Cash Flow	(121,204,498)	(48,285,542)				
E. Investment Return						
E1. Market Total: B-C- D	2,974,029,274	2,015,233,393				
E2. Assumed Rate of Return	7.50%	7.50%				
E3. Assumed Amount of Return	1,255,469,494	1,312,931,104			-----Scheduled-----	
E4. Return Subject to Phase In: E1-E3	1,718,559,780	702,302,289				
F. Phased-In Recognition of Investment Return						
F1. Current year: 0.20xE4	343,711,956	140,460,458	Unknown	Unknown	Unknown	Unknown
F2. First Prior Year	(515,135,167)	343,711,956	-	Unknown	Unknown	Unknown
F3. Second Prior Year	(428,515,358)	(515,135,167)	-	-	Unknown	Unknown
F4. Third Prior Year	(153,262,372)	(428,515,358)	-	-	-	Unknown
F5. Fourth Prior Year	348,631,257	(153,262,372)	-	-	-	-
F6. Total Scheduled Phase in of gain/(loss)	(404,569,684)	(612,740,483)	-	-	-	-
G. Acceptable Phase in of Investment Return						
G1. Projected Funding Value without Phase-in: A+D+E3		18,794,536,380				
G2. Limit on Phase in: B-G1		(478,548,470)				
G3. Acceptable Phase in Amount		(478,548,470)				
H. Funding Value End of Year: A+D+E3+G3	\$17,529,890,818	\$18,315,987,910				
I. Difference Between Market and Funding Value	(1,180,850,759)	-	-	-	-	-
J. Recognized Rate of Return	5.1 %	4.8 %				
K. Market Rate of Return	22.1 %	12.3 %				
L. Ratio of Funding Value to Market Value	107.2 %	100.0 %				

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 15% corridor.

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	
	2004	2003
1. Funding Value of End of Year	\$18,315,987,910	\$17,529,890,818
2. Amounts not used in rate calculations		
a. Suspended Annuity Reserve	9,041,984	7,253,636
b. Disability Benefit Reserve	7,215,198	6,865,654
c. Death Benefit Reserve	7,145,173	8,295,269
d. Supplemental Benefit Reserve	1,474,009	1,683,080
e. Cases removed from rate calculations*	29,328,555	28,284,806
f. Estimated pending reserve transfers	-	-
g. Total	54,204,919	52,382,445
3. Remaining amount to allocate: (1)-(2g)	18,261,782,991	17,477,508,373
4. Total reported negative reserves	(940,342)	(1,069,560)
5. Amount available to positive reserves: (3)-(4)	18,262,723,333	17,478,577,933
6. Total Market Value of reported positive reserves	18,291,393,514	16,339,438,513
7. Market Value Adjustment: (5)-(6)	\$ (28,670,181)	\$ 1,139,139,420

* *Employers that are not included on the asset tape submitted to the actuary. 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	
	2004	2003	2004	2003
Investment portfolio				
Fixed income	\$ 5,729,186,329	\$ 5,453,356,939	31.4%	33.4%
Short term	214,288,637	85,777,137	1.2%	0.5%
Foreign exchange contracts	(3,994,252)	(3,433,200)	0.0%	0.0%
Stocks	8,140,487,433	7,031,734,911	44.7%	43.2%
Bond funds	-	-	0.0%	0.0%
Stock funds and Index Funds	2,880,597,176	2,489,130,082	15.8%	15.3%
Options	-	-	0.0%	0.0%
Real estate	622,868,727	585,260,315	3.4%	3.6%
Alternative investments	562,257,119	519,892,257	3.1%	3.2%
Master trust reserve fund	356,444,981	676,699,070	2.0%	4.2%
Cash	-	-	0.0%	0.0%
Due from brokers	-	-	0.0%	0.0%
Due (to) brokers	(364,932,619)	(607,341,218)	(2.0)%	(3.7)%
Accrued investment income	69,450,787	52,717,538	0.4%	0.3%
Total Invested Assets	18,206,654,318	16,283,793,831	100.0%	100.0%
Receivables	97,959,434	76,972,548		
Cash	30,213,744	7,999,332		
Fixed Assets	725,366	812,530		
Total Market Value	18,335,552,862	16,369,578,240		
Liabilities				
Benefits & vouchers payable	19,564,951	20,538,181		
Total Liabilities	19,564,951	20,538,181		
Nets Assets Available for				
Benefits	\$18,315,987,910	\$16,349,040,059		

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 macro economic forces including productivity, price inflation, and labor market conditions. The wage inflation rate does not include pay changes rated 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 5.0%, 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 page D-7. 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 macro economic forces.

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

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

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. With the exception of mortality tables, the non-economic assumptions are based upon experience during the 1999-2001 period (please see report dated September 18, 2002), and were first used in the December 31, 2002 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 a normal cost was determined for each benefit group (Regular, SLEP, ECO) as a percent-of-payroll. The normal cost was assumed to apply to each employer.

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 15% 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.

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

ACTUARIAL ASSUMPTIONS
DECEMBER 31, 2004
PROBABILITIES OF AGE & SERVICE RETIREMENT

Age at Retirement	Regular Members				SLEP Members
	Reduced Early		Normal		
	Males	Females	Males	Females	
50					25%
51					20%
52					15%
53					10%
54					25%
55	6%	7%	35%	35%	25%
56	6%	7%	35%	35%	20%
57	6%	7%	35%	35%	25%
58	6%	7%	35%	35%	35%
59	6%	7%	35%	35%	15%
60			10%	10%	10%
61			15%	15%	10%
62			25%	20%	25%
63			20%	20%	20%
64			20%	20%	20%
65			40%	30%	25%
66			30%	20%	25%
67			25%	18%	25%
68			23%	18%	25%
69			22%	18%	25%
70-79			20%	18%	100%
80 & Over			100%	100%	100%

For ECO members, retirement probabilities were ten percentage points higher than otherwise indicated on this schedule.

ACTUARIAL ASSUMPTIONS
DECEMBER 31, 2004
PROBABILITIES OF SEPARATION FROM ACTIVE MEMBER STATUS

Service	% Separating Next Year		
	Regular & ECO		SLEP
	Males	Females	
0	23.0%	26.0%	14.0%
1	16.0%	18.0%	10.0%
2	12.5%	14.0%	7.5%
3	10.5%	11.0%	7.0%
4	8.3%	9.5%	6.0%
5	7.0%	8.0%	N.A.
6	6.0%	7.0%	N.A.
7	5.5%	6.5%	N.A.
Age	8 or More Years of Service		5 or More Years of Service
30	5.5%	6.5%	3.0%
35	4.4%	5.8%	2.4%
40	3.4%	4.8%	1.7%
45	2.8%	4.3%	1.5%
50	2.5%	3.7%	1.5%

ACTUARIAL ASSUMPTIONS
DECEMBER 31, 2004
ACTIVE MEMBER PROBABILITIES OF DEATH AND DISABILITY

Sample Ages	% Dying				% Disabled			
	Regular & ECO		SLEP		Regular & ECO		SLEP	
	Male	Female	Male	Female	Male	Female	Male	Female
20	0.02%	0.01%	0.03%	0.02%	0.02%	0.01%	0.03%	0.03%
25	0.02%	0.02%	0.03%	0.02%	0.02%	0.01%	0.05%	0.05%
30	0.03%	0.02%	0.05%	0.03%	0.02%	0.02%	0.08%	0.08%
35	0.04%	0.03%	0.06%	0.03%	0.06%	0.03%	0.11%	0.11%
40	0.06%	0.04%	0.09%	0.04%	0.09%	0.05%	0.17%	0.17%
45	0.11%	0.06%	0.16%	0.07%	0.14%	0.07%	0.24%	0.24%
50	0.20%	0.09%	0.29%	0.11%	0.21%	0.12%	0.36%	0.36%
55	0.31%	0.14%	0.46%	0.17%	0.33%	0.18%	0.50%	0.50%
60	0.46%	0.22%	0.69%	0.27%	0.42%	0.32%	0.46%	0.46%
65	0.78%	0.37%	1.17%	0.44%	0.45%	0.38%	0.31%	0.31%
70	1.38%	0.58%	2.06%	0.70%	0.38%	0.32%	0.18%	0.18%
75	2.23%	1.01%	3.34%	1.21%	0.27%	0.23%	0.05%	0.05%
80	3.70%	1.82%	5.56%	2.18%	0.23%	0.19%	0.00%	0.00%

ACTUARIAL ASSUMPTIONS
DECEMBER 31, 2004
RETIREE, BENEFICIARY, AND DISABLED LIFE MORTALITY

Sample Ages	% Dying Next Year			
	Non-Disabled Lives		Disabled Lives	
	Males	Females	Males	Females
40	0.1176%	0.0705%	0.3714%	0.1738%
45	0.2074%	0.1066%	0.5824%	0.2746%
50	0.3714%	0.1738%	0.8700%	0.4244%
55	0.5824%	0.2746%	1.4812%	0.6969%
60	0.8700%	0.4244%	2.6153%	1.1112%
65	1.4812%	0.6969%	4.2367%	1.9121%
70	2.6153%	1.1112%	7.0366%	3.4575%
75	4.2367%	1.9121%	10.9094%	6.2242%
80	7.0366%	3.4575%	15.7992%	10.7925%

Sample Ages	Life Expectancy Years			
	Non-Disabled Retired Lives		Disabled Lives	
	Males	Females	Males	Females
40	39.0	45.5	29.7	35.9
45	34.3	40.7	25.3	31.3
50	29.7	35.9	21.1	26.8
55	25.3	31.3	17.1	22.4
60	21.1	26.8	13.6	18.3
65	17.1	22.4	10.5	14.4
70	13.6	18.3	7.9	10.9
75	10.5	14.4	6.0	8.0
80	7.9	10.9	4.5	5.8

For non-disabled lives, the mortality rates are the 1983 Group Annuity Mortality Table for Males and the 1983 Individual Annuity Mortality Table for Females both multiplied by 95%. For disabled lives, the mortality rates are the 1983 Group Annuity Mortality Table for Males and the 1983 Individual Annuity Mortality Table for Females both multiplied by 95% and set forward ten years.

**ACTUARIAL ASSUMPTIONS
DECEMBER 31, 2004
PAY INCREASES FOR ACTIVE MEMBERS**

% Increase in Pay Next Year					
6 or More Years Service				Less Than 6 Years of Service	
Age	Merit & Longevity	Economic	Total	Service	% Increase
25	2.5%	4.0%	6.5%	0	7.0%
30	1.9%	4.0%	5.9%	1	5.0%
35	1.3%	4.0%	5.3%	2	3.5%
40	1.0%	4.0%	5.0%	3	3.0%
45	0.9%	4.0%	4.9%	4	2.0%
50	0.7%	4.0%	4.7%	5	1.5%
55	0.6%	4.0%	4.6%		
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 5.0% pay increase during the coming year. But a 40-year-old with 4 years of service is assumed to get a 7.0% increase (5.0% + 2.0%).

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 spouse 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 members and 66 2/3% for ECO members.
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.
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.
Other	Disability decrements operate during retirement eligibility.

**FINANCING UNFUNDED ACCRUED LIABILITIES
AND FULL FUNDING CREDITS
DECEMBER 31, 2004 VALUATIONS**

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

Financing Periods if employer is less than 90% funded on an actuarial basis..

1. Instrumentalities: Remaining period from original 10 years; rolling 5 years if period is already used up.
2. Early Retirement Incentive Plan liabilities: a period up to 10 years selected by the Employer upon adoption of ERI.
3. For existing taxing bodies (Regular, SLEP, and ECO rate Groups): 25 years, reducing one year annually until the remaining period is 10 years, after which time the remaining period will be a rolling 10 years.
4. Employers joining IMRF in 2004: 31 Years; for those joining in 2005: 30 Years; reducing one year each valuation until it reaches 10 years, after which time the remaining period will be a rolling 10 years.

Financing Period if employer is between 90% and 100% funded on an actuarial basis:

5. If Market Value of the entity's plan assets is less than the actuarial value of the entity's plan assets: Do not provide for a reduction in employer contribution rates. Follow the amortization rules for employers which are less than 90% funded on an actuarial basis (see above).
6. If Market Value of the entity's plan assets is greater than the actuarial value of the entity's plan assets: At the option of the employer, amortize the unfunded liability using the market value in lieu of the actuarial value.
7. Early Retirement Incentive Plan liabilities: a period up to 10 years selected by the Employer upon adoption of ERI.

Financing Period if employer is over 100% funded on an actuarial basis.

8. Irrespective of the size of the employer or the funding level, grant the employer an option to amortize overfunding over a 5 year period.
9. For employers with 50 or more employees, grant the employer an option to adopt a minimum contribution rate until the overfunding is eliminated.
10. 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 100%.

The mass production valuation applies rules 1 through 5. IMRF staff applies rules 6 through 10 and reviews each case individually to see if changes are needed to comply with Board policy.

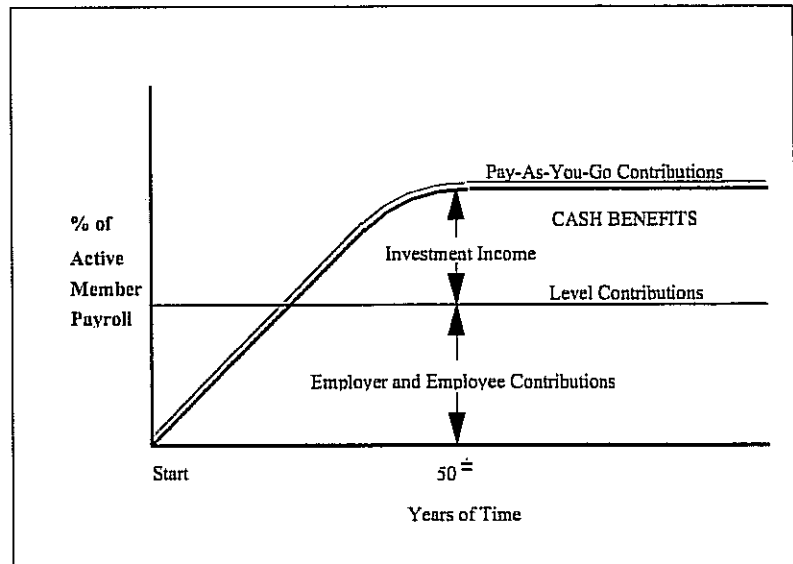
SELECTION OF ASSUMPTIONS USED IN ACTUARIAL VALUATIONS

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



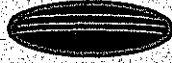
RELATIONSHIP BETWEEN THE BOARD AND THE ACTUARY

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).

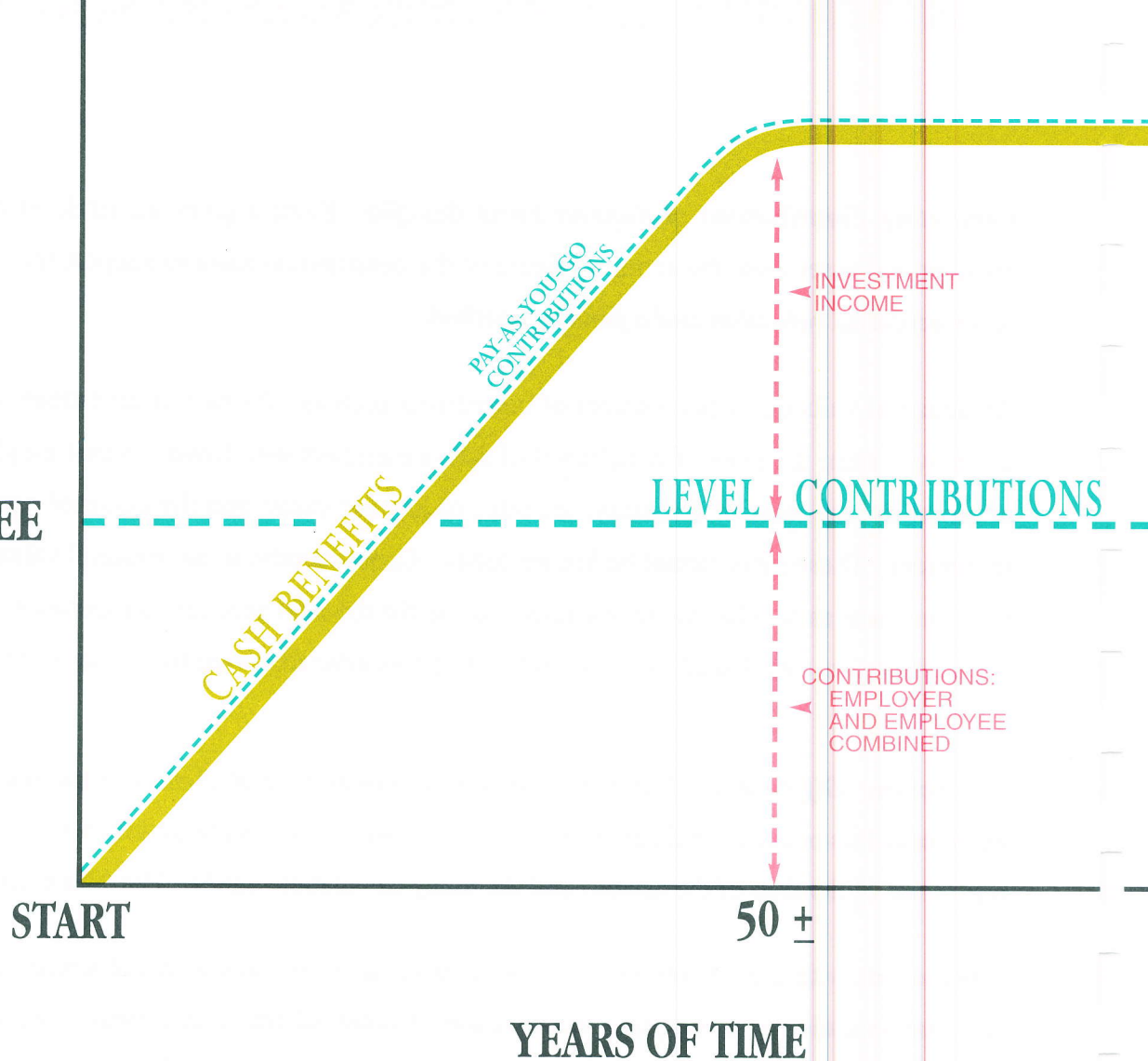
Computing Contributions to Support Fund Benefits. From a given schedule of benefits and from member and asset data, the actuary calculates the contribution rates to support the benefits by means of *an actuarial valuation and a funding method.*

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.

**% OF
ACTIVE
EMPLOYEE
PAYS**



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 opposite 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.

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.