

**The Report of the  
COMPILED 38th ANNUAL ACTUARIAL VALUATIONS  
Based Upon Data as of February 28, 2006  
for the  
Participating Employers  
of the  
MISSOURI LOCAL GOVERNMENT  
EMPLOYEES RETIREMENT SYSTEM**

**Submitted to**

**THE BOARD OF TRUSTEES**

**Missouri Local Government Employees Retirement System**

**GRS**

Gabriel Roeder Smith & Company

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August 30, 2006

The Board of Trustees  
Missouri Local Government Employees Retirement System  
Jefferson City, Missouri

*Submitted in this report* are the compiled results of the *38th annual actuarial valuations* for the Missouri Local Government Employees Retirement System, as amended through February 28, 2006.

*The date of the valuations* was February 28, 2006.

*Actuarial valuations* of individual participating employers are made for the purposes of (i) revising employer contribution rates and (ii) examining the reserve strength of each separately experience-rated group. These individual valuations are made annually for each employer who was participating as of the valuation date. Such valuations were made for *865 groups (527 employers)*.

Actuarial valuations are also made of retired life benefits being paid from the Benefit Reserve Fund to determine the financial condition of this pooled Fund.

*The valuations were based upon data* furnished by LAGERS staff concerning members, retirees and beneficiaries.

*The financial assumptions* used in making the valuations are shown in the Appendix of this report. Assumptions concerning future experience are needed for computing employer contribution rates. As time passes and actual experience develops, assumed and actual experiences are compared. From time to time one or more of the assumptions about the future are changed by the Board after consulting with the actuary. The non-economic assumptions used in performing the 2006 valuations were adopted by the Board in conjunction with a five year experience investigation for the period ending February 28, 2005. The last major changes were to demographic assumptions, which were first used in the 2006 valuations.

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*Your attention is directed particularly* to the COMMENTS on pages 2 and 3, and to the SHORT CONDITION TEST on page B-6.

Based upon the 2006 valuations it is our opinion that *LAGERS continues in sound condition in accordance with actuarial principles of level cost financing*. The overall financial condition is strong.

Respectfully submitted,

Mita D. Drazilov, A.S.A., M.A.A.A.      Judith A. Kermans, E.A., M.A.A.A.

MDD:JAK:rmg:kmg

## Comments on Valuation Results

**Individual valuations of participating employers.** There were 865 new employer contribution rates computed as of February 28, 2006. (Twenty-five groups had no active employees and a dollar contribution was calculated for them. These twenty-five groups are excluded from the totals on this page.) Of the 865 new rates, 640 were decreases from the previous rates, 198 were increases from the previous rates and 27 were unchanged. Further detail is shown in section F. A ten year comparative schedule follows:

Valuation Date	Decreases	Unchanged	Increases	Total
2-28-1997	356	89	241	686
2-28-1998	409	97	205	711
2-28-1999	382	117	232	731
2-29-2000	570	71	106	747
2-28-2001*	605	97	75	777
2-28-2002	326	157	308	791
2-28-2003	202	139	462	803
2-29-2004	314	136	378	828
2-28-2005	300	128	418	846
<b>2-28-2006*</b>	<b>640</b>	<b>27</b>	<b>198</b>	<b>865</b>

\* Revised financial assumptions and/or funding method.

Decreases in employer contribution rates are seldom a problem. Increases can be a problem. Decreases in computed employer contribution rates exceeded increases for two main reasons. First, revised actuarial assumptions resulting from the experience study covering the period February 28, 2000 through February 28, 2005 were used for actuarial valuation purposes. Second, contribution rates for the pooled Casualty Reserve Fund were lowered for the majority of employers.

Investment return exceeded the assumed rate of return on a market value of assets basis as of February 28, 2006. However, scheduled unrecognized investment losses from prior years caused the recognized rate of return on the actuarial value of assets to be less than the assumed 7.5% rate of return. This had an upward pressure on employer contribution rates. The market value of assets now exceeds the actuarial value of assets by approximately 4%. This is a marked improvement over the past several years when actuarial value exceeded market value. (Beginning in 2003, the actuarial value of assets is not allowed to deviate from the market value of assets by more than 20%.)

**Retired life experience.** Financial activities were restructured in 1986. Sufficient reserves continue to provide benefit increases at the 4% maximum average annual rate, subject to inflation caps. The Benefit Reserve Fund funded ratio declined from 111.6% to 110.0% as of February 28, 2006, due to scheduled reserve transfers for retirements that occurred during the valuation year. Page B-11 has detail.

## **Reserve Strength of Each Group Being Separately Experience-Rated**

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"Reserve strength" means the portion of accrued liabilities which are covered by accrued assets. The larger the portion covered, the greater the reserve strength. If liabilities become 100% covered by assets, the group is termed "fully funded."

At the time a local government joins LAGERS the reserve strength of that new employer is zero because there are no assets, while liabilities (for past service) have been generated.

Contributions to LAGERS are patterned so that reserve strength increases year by year.

However, this underlying pattern is being modified each year as actual financial experiences occur. Experiences more favorable than assumed cause reserve strength to increase more than planned, while less favorable experiences reduce reserve strength. Like snowflakes, no two groups have identical experiences.

In addition, reserve strength is lowered when a local government adopts a higher benefit formula (larger liabilities for past service are generated).

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The hundreds of separately experience-rated groups within LAGERS have considerable differences in reserve strength. These differences are summarized on page B-8.

Financially, LAGERS consists of a large number of diverse groups, not a large number of clones of a single LAGERS average.

**Section A**

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**Financial Principles**



# **Financial Principles and Operational Techniques of LAGERS**

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***Promises Made, and To Be Paid For.*** As each year is completed, the system in effect hands an "IOU" to each member then acquiring a year of service credit -- the "IOU" says: "The Missouri Local Government Employees Retirement System owes you one year's worth of retirement benefits, payments in cash commencing when you qualify for retirement."

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 Missouri at the time the IOU becomes a cash demand?

***LAGERS intends that this year's taxpayers contribute the money to cover the IOUs being handed out this year.*** By following this principle, ***the employer contribution rate will remain approximately level from generation to generation*** -- our children and our grandchildren will contribute the same percents of pay we contribute now.

(There are systems which have a design for deferring contributions to future taxpayers lured by a lower contribution rate now and putting aside the fact that the contribution rate must relentlessly grow much greater over decades of time -- consume now, and let your children face your ***financial pollution*** after you've retired.)

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. ***Invested assets are a by-product and not the objective.*** ***Investment income*** becomes in effect ***the 3rd contributor*** for benefits to employees, and is interlocked with the contribution amounts required from employees 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 on Unfunded Actuarial Accrued Liabilities (unfunded actuarial accrued liabilities are the difference between: liabilities for members' service already rendered; and the accrued assets of the governmental unit in the plan).

***Computing Contributions To Support System Benefits.*** From a given schedule of benefits and from the employee data and asset data furnished, the actuary determines 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 before qualifying for any monthly benefit; the rates of mortality; the rates of disability; the rates of pay increases; and the assumed age or ages at actual retirement.

In making an actuarial valuation the system must assume what the above experience will be, for the next year and for decades in the future. Only the subsequent actual experience of the System can indicate the degree of accuracy of the assumptions.

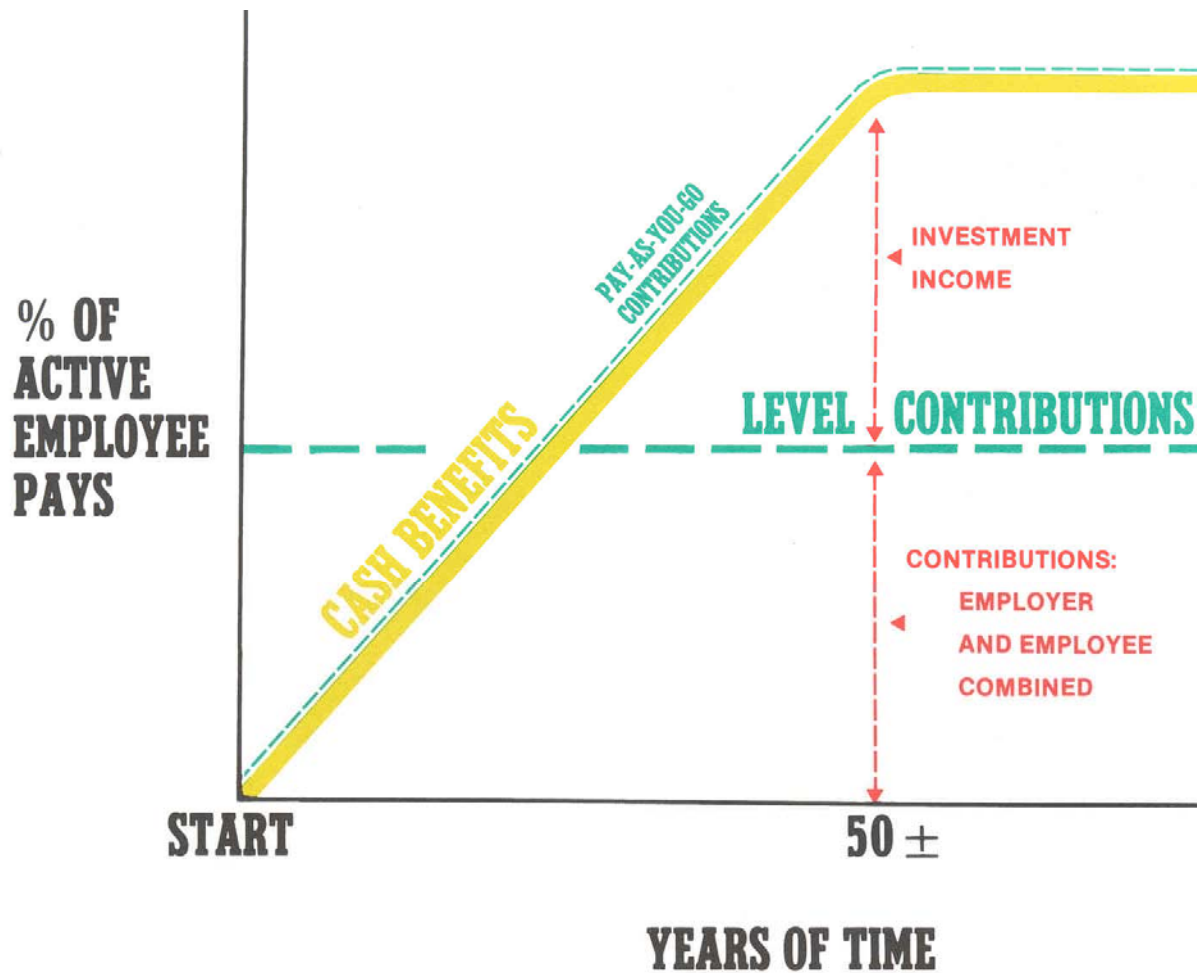
***Reconciling Differences Between Assumed Experience and Actual Experience.*** Once actual experience has occurred and been observed, it will not coincide exactly with assumed experience, regardless of the wisdom of the assumptions and regardless of the skill of the actuary and the calculations made. The future can be predicted with considerable but not complete precision, except that inflation seems to defy reliable prediction.

LAGERS copes with these continually changing differences by having ***annual actuarial valuations***, separately for each participating employer group. Each annual actuarial valuation is a complete recalculation of assumed future experience, taking into account all past differences between assumed and actual experience. The result is continually changing employer contribution rates.

***Generally, the size of an annual change in an employer rate is less than one percent of payroll (up or down)***, particularly for the larger groups, where activities of one or two employees have little effect on the group's status. In periods of volatile investment markets, groups with large Employer Accumulation Fund (EAF) balances may experience larger changes in computed rates.

To avoid causing employer budget problems, LAGERS provides a maximum annual increase of one percent of payroll for any one participating employer. Historically, this limit has generally not been needed (the February 28, 2003 valuations being a particular exception). Beginning with the February 28, 1999 valuations, the maximum allowed annual decrease in an employer contribution rate is also one percent of payroll, unless it is clear that a larger decrease will likely be long term in nature.





**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

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The *actuarial valuation* is the mathematical process by which the contribution rate is determined, and the flow of activity constituting the valuation may be summarized as follows:

- A. ***Covered people data***, furnished by plan administrator, including:
  - Retired lives now receiving benefits
  - Former employees with vested benefits not yet payable
  - Active employees
  
- B. + ***Asset data*** (cash & investments), furnished by plan administrator
  
- C. + ***Assumptions concerning future financial experiences in various risk areas***, which assumptions are established by the Board of Trustees after consulting with the actuary
  
- D. + ***The funding method*** for determining employer contributions (the long-term, planned pattern for employer contributions)
  
- E. + ***Mathematically combining the assumptions, the funding method, and the data***
  
- F. = Determination of:
  - Plan financial position***
  - and/or ***New Employer Contribution Rate***.

**Section B**

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**Valuation Results**



**CHANGE in Employer Contributions\***  
**By Valuation Groups February 28, 2006**

Group	Number of Active Members	Number of Valuation Groups with Indicated Change in Employer Contribution Rate						Totals
		Decreases			Unchanged 0.00%	Increases		
		Over 1.00%	0.51% to 1.00%	0.01% to 0.50%		0.01% to 0.50%	0.51% to 1.00%	
General:	1 - 9	26	59	64	8	10	33	200
	10 - 49	26	61	79	5	19	20	210
	50 & up	<u>21</u>	<u>36</u>	<u>37</u>	<u>2</u>	<u>15</u>	<u>8</u>	<u>119</u>
	Totals	73	156	180	15	44	61	529
Police:	1 - 9	14	32	38	4	7	31	126
	10 - 49	10	22	54	5	10	23	124
	50 & up	<u>2</u>	<u>8</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>4</u>	<u>20</u>
	Totals	26	62	95	10	19	58	270
Fire:	1 - 9	11	4	4	1	3	3	26
	10 - 49	12	7	7		1	7	34
	50 & up	<u>2</u>	<u>1</u>	<u>—</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>6</u>
	Totals	25	12	11	2	5	11	66
Totals		124	230	286	27	68	130	865

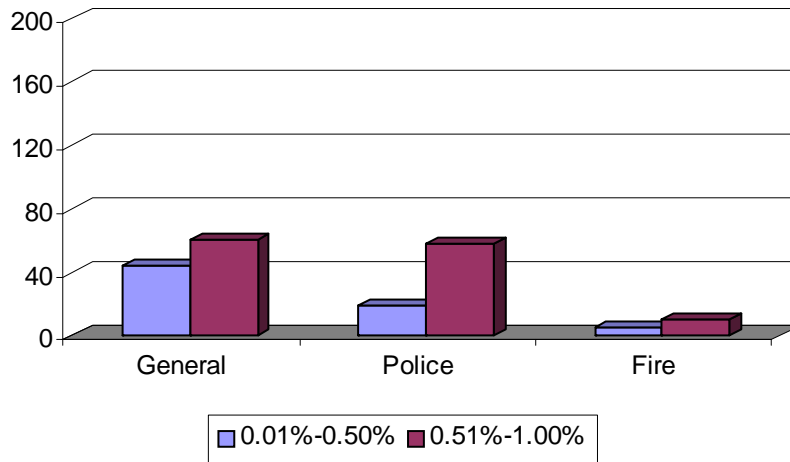
\* Includes changes in employer contribution rates due to actual experience, changes in actuarial assumptions and changes in actuarial methods. It does not include changes in employer contribution rates due to benefit program changes.

In broad terms, the smaller the group, the greater the chance of a relatively large change in employer rate from one year to the next.

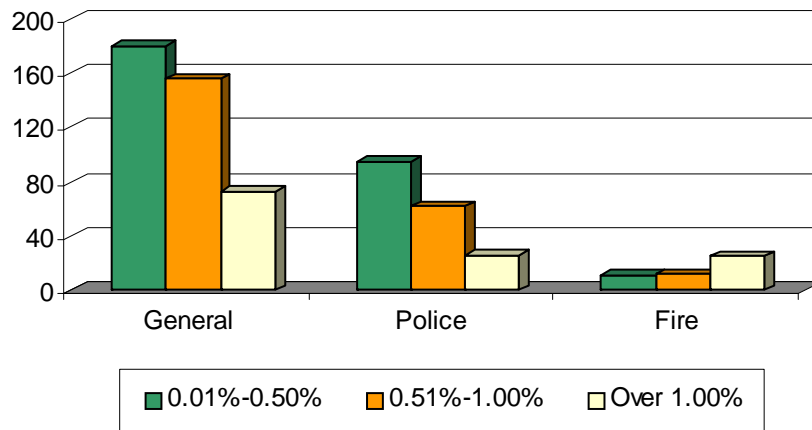
# Missouri LAGERS

## Change in Employer Contribution Rate\* By Valuation Group

### Increases



### Decreases



\* Includes changes in employer contribution rates due to actual experience, changes in actuarial assumptions and changes in actuarial methods. It does not include changes in employer contribution rates due to benefit program changes.

## Schedule of Funding Progress

Each time a new employer joins the System, or an employer adopts a higher level of benefits, unfunded actuarial accrued liabilities are created. The law governing the System requires that these additional obligations be financed systematically over a period of future years.

In an inflationary economy the value of dollars is decreasing. This environment results in employee pays increasing in dollar amounts, retirement benefits increasing in dollar amounts, and then, unfunded actuarial accrued liabilities, all at a time when the actual substance of these items may be decreasing. Looking at just the dollar amounts of unfunded actuarial accrued liabilities can be misleading. Unfunded actuarial accrued liability dollars divided by active employee payroll provides an index which helps understanding. The smaller the ratio of unfunded liabilities to active member payroll, the stronger the System.

### Schedule of Funding Progress

Valuation Date	(a) Actuarial Value of Assets	(b) Entry Age Actuarial Accrued Liability	(b-a) Unfunded Accrued Liability (UAL)	(a/b) Funded Ratio	(c) Annual Covered Payroll	[(b-a)/c] UAL as a % of Covered Payroll
2-28-1997	\$ 1,356,624,078	\$ 1,520,483,332	\$ 163,859,254	89.2%	\$ 627,184,823	26.1%
2-28-1998	1,592,940,530	1,719,428,702	126,488,172	92.6	667,085,761	19.0
2-28-1999	1,818,112,722	1,940,840,958	122,728,236	93.7	716,154,828	17.1
2-29-2000	2,129,073,917	2,153,498,866	24,424,949	98.9	757,753,142	3.2
2-28-2001 #	2,395,912,598	2,302,816,630	(93,095,968)	104.0	808,959,292	-
2-28-2002	2,623,610,917	2,613,087,737	(10,523,180)	100.4	875,061,292	-
2-28-2003	2,603,872,640	2,700,198,619	96,325,979	96.4	932,953,679	10.3
2-29-2004	2,808,907,263	2,929,171,779	120,264,516	95.9	989,446,058	12.2
2-28-2005	2,984,489,211	3,139,260,243	154,771,032	95.1	1,031,415,223	15.0
2-28-2006 #	3,224,173,714	3,383,152,937	158,979,223	95.3	1,082,349,535	14.7

# *Revised actuarial assumptions*

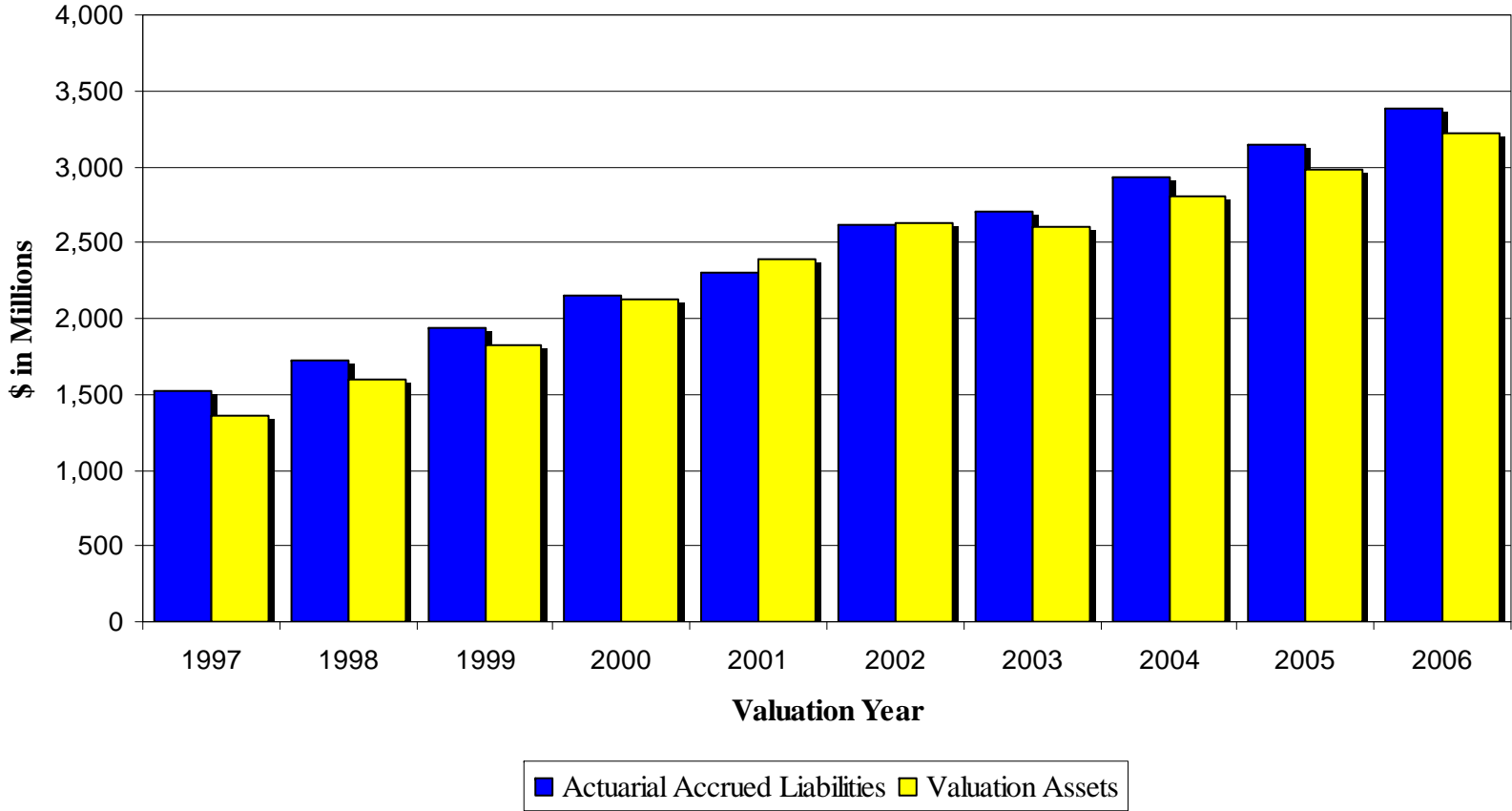
Each employer participating in the System is financially responsible for its own obligation. Accordingly, the aggregate numbers presented on this and the following pages are indicative only of the overall condition of the System and are not indicative of any one employer.

Factors that generally have a downward effect on the funded ratio include:

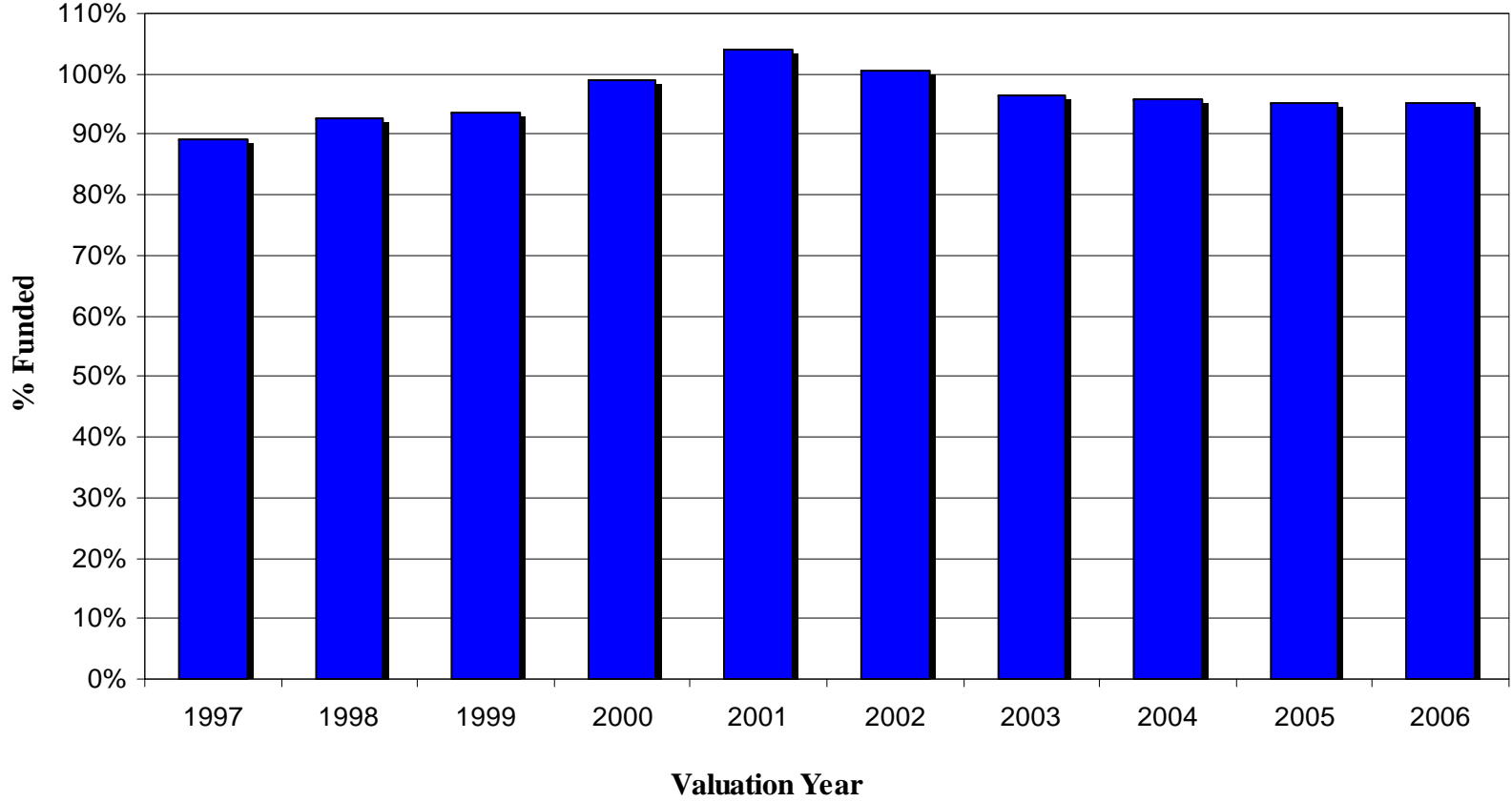
- Employers adopting new benefit programs. For example, before reflecting the benefit changes adopted by political subdivisions during the year, the 2-28-2005 and 2-28-2006 Funded Ratios would have been 95.1% (instead of 95.1%) and 95.9% (instead of 95.3%), respectively.
- New employers joining LAGERS (who at time of joining do not have assets on hand to cover actuarial accrued liabilities associated with past service).
- The planned reduction in funding levels (through reduced employer contributions) for employers that are over 100% funded.

Factors that generally have an upward effect on the funded ratio include scheduled employer contributions and favorable investment experience.

**Missouri LAGERS**  
**Portion of Actuarial Accrued Liabilities**  
**Covered by Valuation Assets**



**Missouri LAGERS  
Valuation Assets as a Percent of  
Actuarial Accrued Liabilities**





## Short Condition Test

The LAGERS funding objective is to meet long-term benefit promises through contributions that remain approximately level from year to year as a percent of member payroll. If the contributions to the System 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 the actuarial accrued liabilities for: (1) active member contributions on deposit; (2) future benefits to present retired lives; and (3) service already rendered by active members. In a system that has been following the discipline of level percent of payroll financing, the liabilities for active member contributions on deposit and for future benefits to present retired lives will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active members 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.

The schedule below illustrates the most recent 10 year history of the System's actuarial accrued liabilities and is indicative of the LAGERS policy of following the discipline of level percent of payroll financing.

### Short Condition Test Comparative Schedule

Valuation Date	Entry Age Accrued Liability For			Actuarial Value of Assets	Portion of Accrued Liability Covered by Assets		
	(1) Active Member Contributions	(2) Retirants and Beneficiaries*	(3) Active Members (Employer Financed Portion)		(1)	(2)	(3)
	2-28-1997	\$ 47,811,978	\$ 550,904,104		\$ 921,767,250	\$ 1,356,624,078	100%
2-28-1998	54,045,521	650,291,340	1,015,091,841	1,592,940,530	100	100	88
2-28-1999	55,329,128	756,345,932	1,129,165,898	1,818,112,722	100	100	89
2-29-2000	57,118,191	867,281,953	1,229,098,722	2,129,073,917	100	100	98
2-28-2001 #	59,548,771	916,644,950	1,326,622,909	2,395,912,598	100	100	107
2-28-2002	62,603,672	1,010,156,078	1,540,327,987	2,623,610,917	100	100	101
2-28-2003	66,742,613	926,249,428	1,707,206,578	2,603,872,640	100	100	94
2-29-2004	70,562,031	1,026,668,962	1,831,940,786	2,808,907,263	100	100	93
2-28-2005	72,252,574	1,098,286,478	1,968,721,191	2,984,489,211	100	100	92
2-28-2006 #	75,835,009	1,199,273,243	2,108,044,685	3,224,173,714	100	100	92

# Revised actuarial assumptions.

\* Includes reserve for future benefit increases.

## **Employers Accumulation Fund**

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*The Employers Accumulation Fund* assets totaled \$1,926,024,466 as of February 28, 2006 based on the actuarial value of assets. The individual participating Employers Accumulation Fund accrued liabilities (entry age normal cost method) were computed to be \$2,085,003,689 as of that date.

Each time a new employer joins the System, or an employer adopts a higher level of benefit, unfunded accrued liabilities are created. The law governing the System requires that these additional EAF liabilities be financed systematically over a period of future years.

*Each employer is financially responsible for its own EAF liabilities.* Accordingly, the aggregate numbers presented for the Employers Accumulation Fund are indicative only of overall condition and not indicative of the status of any individual employer.

### **Employers Accumulation Fund Aggregate Accrued Liabilities and Actuarial Value of Assets Comparative Statement**

<b>Valuation Date</b>	<b>Actuarial Value of Assets</b>	<b>Aggregate Accrued Liabilities</b>	<b>Ratio of Assets to Liabilities*</b>
2-28-1997	\$ 756,144,924	\$ 920,004,178	82.2%
2-28-1998	882,637,910	1,009,126,082	87.5
2-28-1999	1,000,606,196	1,123,334,432	89.1
2-29-2000	1,198,046,097	1,222,471,046	98.0
2-28-2001#	1,412,925,554	1,319,829,586	107.1
2-28-2002	1,543,329,341	1,532,806,161	100.7
2-28-2003	1,601,631,161	1,697,957,140	94.3
2-29-2004	1,697,031,492	1,817,296,008	93.4
2-28-2005	1,796,054,158	1,950,825,190	92.1
2-28-2006#	1,926,024,466	2,085,003,689	92.4

# *Revised actuarial assumptions.*

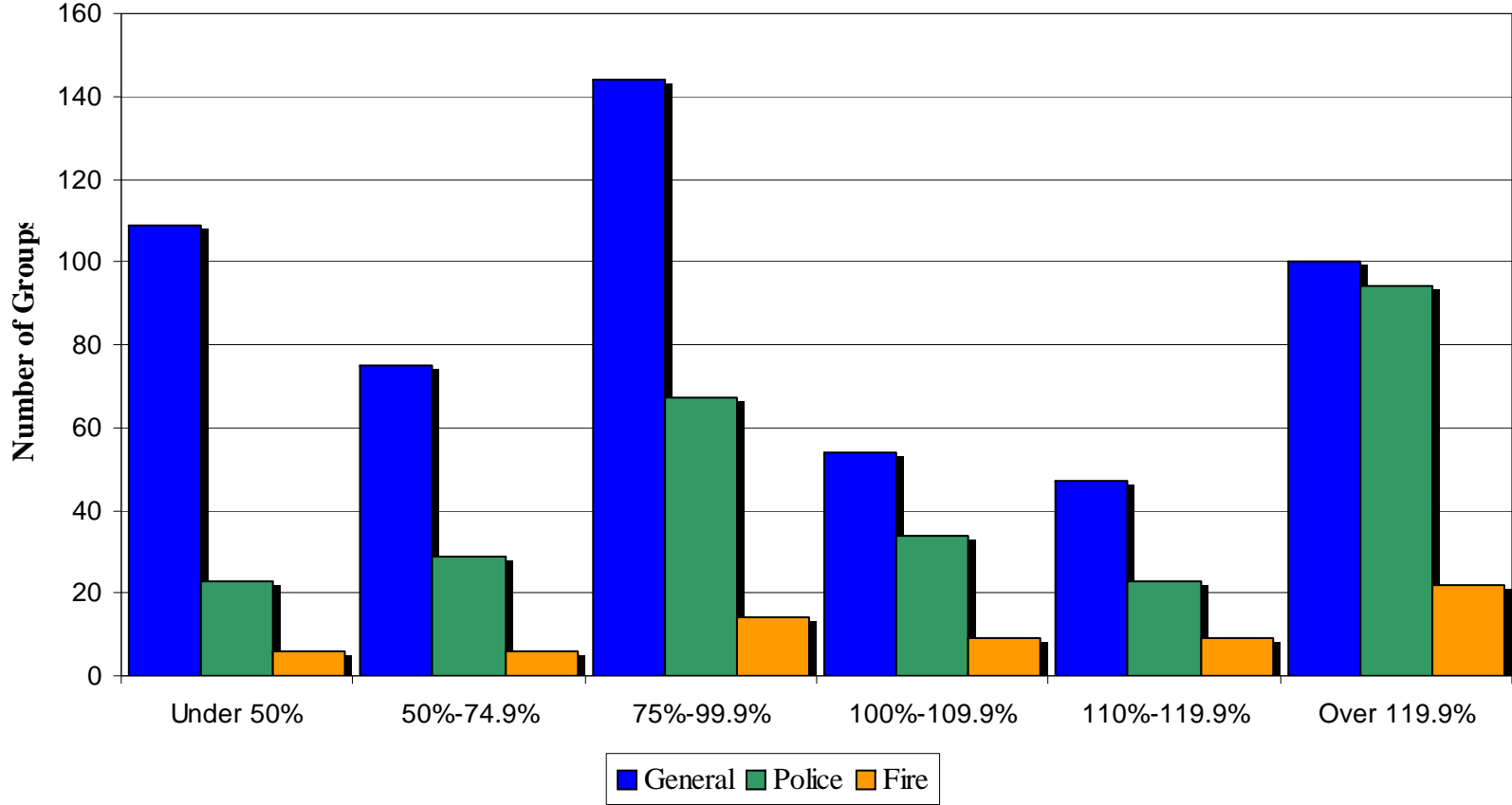
\* *The larger the ratio of assets to liabilities, the greater the reserve strength of the Employers Accumulation Fund.*

**Employers Accumulation Fund**  
**PORTION of LIABILITIES covered by ASSETS**  
**By Valuation Groups February 28, 2006**

Group	Number of Active Members	Number of Valuation Groups with Assets as a Percent of Actuarial Accrued Liabilities						
		Under 50.0%	50.0% - 74.9%	75.0% - 99.9%	100.0% - 109.9%	110.0% - 119.9%	Over 119.9%	Totals*
General:	1 - 9	84	29	36	5	10	36	200
	10 - 49	19	35	62	29	21	44	210
	50 & up	<u>6</u>	<u>11</u>	<u>46</u>	<u>20</u>	<u>16</u>	<u>20</u>	<u>119</u>
	Totals	109	75	144	54	47	100	529
Police:	1 - 9	17	20	25	6	8	50	126
	10 - 49	5	7	32	25	12	43	124
	50 & up	<u>1</u>	<u>2</u>	<u>10</u>	<u>3</u>	<u>3</u>	<u>1</u>	<u>20</u>
	Totals	23	29	67	34	23	94	270
Fire:	1 - 9	3	6	4	1	4	8	26
	10 - 49	2		7	6	5	14	34
	50 & up	<u>1</u>	---	<u>3</u>	<u>2</u>	---	---	<u>6</u>
	Totals	6	6	14	9	9	22	66
Totals*		138	110	225	97	79	216	865

\* Not included in this tabulation are 25 groups which presently have no active members.

**Missouri LAGERS  
Employers Accumulation Fund  
Portion of Liabilities Covered by Assets**



## Members Deposit Fund

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*The Members Deposit Fund* assets for active members totaled \$75,835,009 as of February 28, 2006.

The Members Deposit Fund actuarial accrued liabilities are set equal to assets.

### Members Deposit Fund Aggregate Actuarial Accrued Liabilities and Actuarial Value of Assets Comparative Statement

<b>Valuation Date</b>	<b>Actuarial Value of Assets</b>	<b>Aggregate Accrued Liabilities</b>	<b>Ratio of Assets to Liabilities</b>
2-28-1997	\$ 53,931,368	\$ 53,931,368	100.0%
2-28-1998	54,045,521	54,045,521	100.0
2-28-1999	55,329,128	55,329,128	100.0
2-29-2000	57,118,191	57,118,191	100.0
2-28-2001	59,548,771	59,548,771	100.0
2-28-2002	62,603,672	62,603,672	100.0
2-28-2003	66,742,613	66,742,613	100.0
2-29-2004	70,562,031	70,562,031	100.0
2-28-2005	72,252,574	72,252,574	100.0
2-28-2006	75,835,009	75,835,009	100.0

## Benefit Reserve Fund

*The Benefit Reserve Fund* assets as of February 28, 2006 totaled \$1,199,273,243 based on the actuarial value of assets. The present value of future benefits was computed to be \$1,090,639,821 as of that date.

When a member retires, there is transferred to the Benefit Reserve Fund a single sum reserve which is expected to cover all future pension benefits; this reserve is calculated based on assumptions about mortality and an assumed annual investment return rate of 4%.

*Beginning in 1986*, each year LAGERS actual investment return rate is credited to the Benefit Reserve Fund. The excess, if any, of the actual investment return rate over the assumed 4% provides the money from which the Board can grant benefit increases after retirement. Beginning in 1999 the investment return credit is limited if the funded ratio exceeds 140%. Beginning in 2002 the threshold was changed to 125%.

The most recent such benefit increase occurred October 1, 2005 and consisted of an overall increase of 4% or less.

### Benefit Reserve Fund Actuarial Accrued Liabilities and Accrued Assets Comparative Statement

Annual Valuation Date	Pensions Being Paid	Benefit Increase % Last Oct. 1	Investment Return % Last June 30	Present Value of Future Benefits	Reserve for Future Experience	Accrued Liabilities	Actuarial Value of Assets	Ratio of Actuarial Value of Assets to PVFB
2-28-1997	\$36,759,417	4.0%	13.5%	\$410,670,528	\$140,233,576	\$550,904,104	\$550,904,104	134.1%
2-28-1998	41,599,468	4.0	11.4	467,563,884	182,727,456	650,291,340	650,291,340	139.1
2-28-1999	46,365,846	4.0	17.0	520,260,156	236,085,776	756,345,932	756,345,932	145.4
2-29-2000	51,921,290	4.0	5.6	583,429,164	283,852,789	867,281,953	867,281,953	148.7
2-28-2001 #	57,989,017	4.0 @	14.4	636,824,117	279,820,833	916,644,950	916,644,950	143.9
2-28-2002	65,001,494	4.0 @	3.1	717,019,826	293,136,252	1,010,156,078	1,010,156,078	140.9
2-28-2003	71,769,505	4.0 @	(15.6)	794,736,064	131,513,364	926,249,428	926,249,428	116.5
2-29-2004	79,465,768	4.0	(5.4)	886,280,744	140,388,218	1,026,668,962	1,026,668,962	115.8
2-28-2005	87,954,992	4.0	11.4	984,095,358	114,191,120	1,098,286,478	1,098,286,478	111.6
2-28-2006 #	97,259,442	4.0	7.5	1,090,639,821	108,633,422	1,199,273,243	1,199,273,243	110.0

# Revised actuarial assumptions.

@ The overall benefit increase % was 4.0% even though individuals received varying benefit increase %'s.

## Casualty Reserve Fund

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Beginning with the 1989 valuation, at the time a disability benefit becomes payable there is transferred from the Casualty Reserve Fund to the Benefit Reserve Fund the difference between (i) the full employer reserve covering the disability benefit and (ii) the accrued service liability of the Employer Accumulation Fund for the member who became disabled.

Employer contributions to cover the transfers described above are determined on a pooled-group basis (not separately for each financing group). The contribution rates, varying by size of benefit formula, were last changed in 2006.

<b>Benefit Formula</b>	<b>Employer Contribution Rate to the CRF</b>
L-1, LT-4	0.3%
L-3, LT-5, L-7, LT-8	0.4%
L-9, LT-10, L-12, LT-14	0.5%
L-6, L-11	0.6%

If there is a positive balance in the Casualty Reserve Fund at any time, it indicates that cumulative past contributions have fully funded the cumulative past obligations --- similarly, a negative balance would indicate that cumulative past contributions have fallen short of the target.

For actuarial valuation purposes, actuarial accrued liabilities equal the actuarial value of assets.

### Casualty Reserve Fund Actuarial Value of Assets at Valuation Dates Comparative Statement

<b>Valuation Date</b>	<b>Employer L-1 Contributions: Year Ended</b>	<b>Actuarial Value of Assets</b>	<b>Accrued Liabilities</b>	<b>Assets Expressed as Percents of Member Payroll</b>	
				<b>Total</b>	<b>Change</b>
2-28-1997	0.5%	\$ (4,356,318)	\$ (4,356,318)	-0.7%	-0.6%
2-28-1998 @	0.5	5,965,759	5,965,759	0.9	1.6
2-28-1999	0.5	5,831,466	5,831,466	0.8	-0.1
2-29-2000	0.5	6,627,676	6,627,676	0.9	0.1
2-28-2001	0.5	6,793,323	6,793,323	0.8	-0.1
2-28-2002	0.5	7,521,826	7,521,826	0.9	0.1
2-28-2003	0.5	9,249,438	9,249,438	1.0	0.1
2-29-2004	0.5	14,644,778	14,644,778	1.5	0.5
2-28-2005	0.5	17,896,001	17,896,001	1.7	0.2
2-28-2006	0.3	23,040,996	23,040,996	2.1	0.4

@ Reflects special \$10 million transfer to the Casualty Reserve Fund.

**Section C**

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**Asset Data Used in the Valuations**





## Reported Accrued Assets Available for Benefits February 28, 2006

Statutory Funds	Reported Assets	Actuarial Value of Assets
Employers Accumulation Fund	\$1,574,910,819	\$1,926,024,466
Members Deposit Fund	75,835,009	75,835,009
Benefit Reserve Fund	988,928,212	1,199,273,243
Casualty Reserve Fund	18,999,749	23,040,996
<b>Total</b>	<b>\$2,658,673,789</b>	<b>\$3,224,173,714</b>

*The Actuarial Value of Assets* is based on market value, but with a 5-year smoothing of the difference between projected investment return, based on the actuarial assumption, and actual market to market returns. The actuarial value of assets is not permitted to deviate from market value by more than 20%. The derivation of the actuarial value of assets (also called the funding value of assets) is shown on pages C-3 and C-4. The funding value adjustment factor is applied to the reported cost value of assets of each employer. The funding value adjustment factor serves two purposes:

- it incorporates the balance in the Income-Expense Fund for actuarial valuation purposes, since it is not allocated until June 30, and
- it converts the reported cost value of assets to the actuarial value of assets.

*The Employers Accumulation Fund* represents employer contributions accumulated for benefits to or on behalf of present members.

*The Members Deposit Fund* represents employee contributions accumulated for (1) monthly benefits upon future retirements and (2) refunds upon termination if monthly benefits are not payable.

*The Benefit Reserve Fund* represents employer and employee reserves held for the monthly benefits being paid to present retired lives.

*The Casualty Reserve Fund* represents employer contributions accumulated for the added liability incurred when a member becomes a disability retirement.

*The Income-Expense Fund* represents investment income received less administrative expenses paid. At the end of the system fiscal year interest is paid to the other four Funds from this Fund. The February 28, 2006 balance in the Income-Expense Fund was used for valuation purposes.

## Investment Activities

A retirement system acquires and invests assets as the result of following the financial objective of level contribution rates. The Board of Trustees of LAGERS has the responsibility for seeing that the assets are invested effectively and within the limits imposed by law. The Board retains professional money managers to assist in the investment process, and reviews their activities throughout each year.

There follows a table showing investment credits to the various Funds of the system for the last 5 years.

### Rates of Investment Return Allocated to LAGERS Fund Accounts

Year Ended June 30	Investment Credits as % of Fund Balance				Inflation Loss % (CPI)
	Casualty Reserve Fund A	Member Deposit Fund B	Benefit Reserve Fund C	Employer Accumulation Fund D	
	2002	7.5%	4.0%	(15.6)%	
2003	7.5	4.0	(5.4)	(5.9)	2.1
2004	7.5	4.0	11.4	11.8	3.2
2005	7.5	4.0	7.5	7.7	2.5
2006	7.5	4.0	15.3	15.9	4.3
5 Year Compound Average			2.0%	5.6%	2.6%

- A. Casualty Reserve assets are for the non-accrued service portion of disability benefits to future disabled lives. The investment percent is the rate set for actuarial purposes.
- B. Member Deposit assets are the contributions of present members. The investment percent, set by the Board, affects amounts payable to members who request a refund. The percent does not affect the monthly benefit of a retiring member.
- C. Benefit Reserve assets are for benefits to present retired lives. The investment credit is the remainder of net investment return after crediting the Casualty Reserve assets. This revised allocation of investment credits is intended to provide the resources for additional benefit increases after retirement, and is based upon a 1986 change in the LAGERS law. Beginning in 1999 the investment credit to the Benefit Reserve Fund (BRF) is limited, if the funded ratio of the BRF exceeds 140%. Beginning in 2002 the threshold was changed to 125%. In addition, for the 2002 interest credits the BRF interest credit was further reduced to permit a 0.0% interest credit to the EAF.
- D. Employer Accumulation assets are for benefits to future retired lives including the accrued service portion of disability benefits. The investment credit is the remainder of net investment return after crediting the Casualty Reserve assets, followed by a further adjustment for the investment credit to the Member Deposit assets (and beginning in 1999 for any reallocation of investment credits from the Benefit Reserve Fund). The Employer Accumulation Fund is responsible for covering liability increases resulting from inflation losses. The percentages shown include net realized capital gains on sale of investments (cost value).

## Missouri LAGERS

### Development of Funding Value of Retirement System Assets

Year Ending February 28:	2002	2003	2004	2005
A. Actuarial Value Beginning of Year	\$2,389,634,186	\$2,616,628,515	\$2,603,834,872	\$2,808,860,773
B. Market Value End of Year	2,407,123,169	2,169,862,393	2,831,382,994	3,114,372,296
C. Market Value Beginning of Year	2,489,404,871	2,407,123,169	2,169,862,393	2,831,382,994
D. Non-Investment/Administrative Net Cash Flow	27,079,368	19,398,493	14,085,194	8,469,665
E. Investment Income				
E1. Market Total: B-C-D	(109,361,070)	(256,659,269)	647,435,407	274,519,637
E2. Assumed Rate of Return	7.50%	7.50%	7.50%	7.50%
E3. Amount for Immediate Recognition	180,238,040	196,974,582	195,815,810	210,982,170
E4. Amount for Phased-In Recognition: E1-E2	(289,599,110)	(453,633,851)	451,619,597	63,537,467
F. Phased-In Recognition of Investment Income				
F1. Current Year: 0.20 x E4	(57,919,822)	(90,726,770)	90,323,919	12,707,493
F2. First Prior Year	(34,359,284)	(57,919,822)	(72,768,306)	90,323,919
F3. Second Prior Year	64,312,721	(34,359,284)	(46,455,168)	(72,768,306)
F4. Third Prior Year	(3,373,650)	64,312,721	(27,558,204)	(46,455,168)
F5. Fourth Prior Year	51,016,956	(3,373,648)	51,582,656	(27,558,204)
F6. Total Recognized Phase-Ins	19,676,921	(122,066,803)	(4,875,103)	(43,750,266)
G. <b>Actuarial Value End of Year</b>				
G1. Preliminary Actuarial Value End of Year: A+D+E3+F6	\$2,616,628,515	\$2,710,934,787	\$2,808,860,773	\$2,984,562,342
G2. Upper Corridor Limit: 120% x B		\$2,603,834,872	\$3,397,659,593	\$3,737,246,755
G3. Lower Corridor Limit: 80% x B		\$1,735,889,914	\$2,265,106,395	\$2,491,497,837
G4. Actuarial Value End of Year	\$2,616,628,515	\$2,603,834,872	\$2,808,860,773	\$2,984,562,342
H. Difference Between Market & Actuarial Value	(209,505,346)	(433,972,479)	22,522,221	129,809,954
I. Ratio of Actuarial Value to Market Value	108.7%	120.0%	99.2%	95.8%
J. Actuarial Value Adjustment Factor (ratio of actuarial value to EAF+MDF+CRF+BRF cost value)	1.0741	1.1223	1.2708	1.2101
K. Recognized Rate of Return	8.32%	(1.23)%	7.31%	5.94%
L. Market Rate of Return	(4.37)%	(10.62)%	29.74%	9.68%

The asset valuation method recognizes assumed investment income (line E2) fully each year. Differences between actual and expected investment income (line E4) are phased in over a closed 5 year period. If in the future, total investment income (line E1) were always equal to assumed investment income (line E3), Funding Value and Market Value would be identical 4 years after the valuation date (line H).

Note: Asset values on this page differ slightly from asset values reported elsewhere in this report, due to a number of miscellaneous closing entries that are not included in the above amounts and rounding.

## Missouri LAGERS

### Development of Funding Value of Retirement System Assets

Year Ending February 28:	2006	2007	2008	2009	2010
A. Actuarial Value Beginning of Year	\$2,984,562,342				
B. Market Value End of Year	3,465,462,225				
C. Market Value Beginning of Year	3,114,372,296				
D. Non-Investment/Administrative Net Cash Flow	7,997,305				
E. Investment Income					
E1. Market Total: B-C-D	343,092,624				
E2. Assumed Rate of Return	7.50%				
E3. Amount for Immediate Recognition	224,142,075				
E4. Amount for Phased-In Recognition: E1-E2	118,950,549				
F. Phased-In Recognition of Investment Income					
F1. Current Year: 0.20 x E4	23,790,110				
F2. First Prior Year	12,707,493	\$ 23,790,110			
F3. Second Prior Year	90,323,919	12,707,493	\$ 23,790,110		
F4. Third Prior Year	(72,768,306)	90,323,919	12,707,493	\$ 23,790,110	
F5. Fourth Prior Year	(46,455,168)	(72,768,307)	90,323,921	12,707,495	\$ 23,790,111
F6. Total Recognized Phase-Ins	7,598,048	54,053,215	126,821,524	36,497,605	23,790,111
G. <b>Actuarial Value End of Year</b>					
G1. Preliminary Actuarial Value End of Year: A+D+E3+F6	\$3,224,299,770				
G2. Upper Corridor Limit: 120% x B	\$4,158,554,670				
G3. Lower Corridor Limit: 80% x B	\$2,772,369,780				
G4. Actuarial Value End of Year	\$3,224,299,770				
H. Difference Between Market & Actuarial Value	241,162,455	187,109,240	60,287,716	23,790,111	
I. Ratio of Actuarial Value to Market Value	93.0%				
J. Actuarial Value Adjustment Factor (ratio of actuarial value to EAF+MDF+CRF+BRF cost value)	1.2127				
K. Recognized Rate of Return	7.75%				
L. Market Rate of Return	11.00%				

The asset valuation method recognizes assumed investment income (line E2) fully each year. Differences between actual and expected investment income (line E4) are phased in over a closed 5 year period. If in the future, total investment income (line E1) were always equal to assumed investment income (line E3), Funding Value and Market Value would be identical 4 years after the valuation date (line H).

Note: Asset values on this page differ slightly from asset values reported elsewhere in this report, due to a number of miscellaneous closing entries that are not included in the above amounts and rounding.

## **Section D**

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### **Benefit Provisions Considered in the Valuation**

**Missouri Local Government Employees Retirement System**  
**Brief Summary of LAGERS**  
**Benefits and Conditions Evaluated and/or Considered**  
**Through February 28, 2006**  
**(Section references are to RSMo)**

**Voluntary Retirement.** Sections 70.645 & 70.600. A member may retire with an age & service allowance after both (i) completing 5 years of credited service, and (ii) attaining the minimum service retirement age.

The minimum service retirement age is age 60 for a general employee and age 55 for a police or fire employee. Optionally, employers may also elect to provide for unreduced benefits for employees whose combination of years of age and years of service equals 80 or more.

**Final Average Salary.** Section 70.600. The average of a member's monthly compensation during the period of 60 consecutive months (or optionally, 36 consecutive months) of credited service producing the highest monthly average, which period is contained within the 120 consecutive months of credited service immediately preceding retirement.

**Age & Service Allowance.** Section 70.655. The allowance, payable monthly for life, equals a specified percent of a member's final average salary multiplied by the number of years of credited service. Each employer elects the percent applicable to its members, from the following programs:

L-1 Benefit Program: 1.00% for life

L-3 Benefit Program: 1.25% for life

L-7 Benefit Program: 1.50% for life

LT-4 Benefit Program: 1.00% for life, plus 1.00% to age 62

LT-5 Benefit Program: 1.25% for life, plus 0.75% to age 62

LT-8 Benefit Program: 1.50% for life, plus 0.50% to age 62

LT-4(65) Benefit Program: 1.00% for life, plus 1.00% to age 65

LT-5(65) Benefit Program: 1.25% for life, plus 0.75% to age 65

LT-8(65) Benefit Program: 1.50% for life, plus 0.50% to age 65

L-9 Benefit Program: 1.60% for life

LT-10(65) Benefit Program: 1.60% for life, 0.40% to age 65

L-12 Benefit Program: 1.75% for life

LT-14(65) Benefit Program: 1.75% for life, 0.25% to age 65

L-6 Benefit Program: 2.00% for life

L-11 Benefit Program: 2.50% for life

The only LT benefit programs available for adoption after August 1, 1994 are the LT(65) programs.

Benefit programs L-9 and LT-10(65) are unavailable for adoption after August 1, 2005.

Benefit program L-11 is only available to groups not covered by Social Security.

Subsequent to joining the System the governing body can elect to change benefit programs for the employees, but not more often than once every 2 years.

**Early Allowance.** Section 70.670. A member may retire with an early allowance after both (i) completing 5 years of credited service, and (ii) attaining age 55 if a general employee or age 50 if a police or fire employee.

The early allowance amount, payable monthly for life, is computed in the same manner as an age & service allowance, based upon the service and earnings record to time of early retirement, but reduced to reflect the fact that the age when payments begin is younger than the minimum service retirement age. The amount of the reduction is 1/2% of 1% (.005) for each month the age at retirement is younger than the minimum service retirement age.

**Deferred Allowance.** Section 70.675. If a member leaves LAGERS-covered employment (i) before attaining the early retirement age, and (ii) after completing 5 years of credited service, the member becomes eligible for a deferred allowance; provided the former member lives to the minimum service retirement age and does not withdraw the accumulated contributions.

The deferred allowance amount, payable monthly for life from the minimum service retirement age, is computed in the same manner as an age & service allowance, based upon the service and earnings record to time of leaving LAGERS coverage.

Deferred allowances are also payable any time after reaching the early retirement age, with the reduction for early retirement noted on the previous page.

**Non-Duty Disability Allowance.** Section 70.680. A member with 5 or more years of credited service who becomes totally and permanently disabled from other than duty-connected causes become eligible to receive a non-duty disability allowance computed in the same manner as an age & service allowance, based upon the service & earnings record to time of disability.

**Duty Disability Allowance.** Section 70.680. A member who becomes totally and permanently disabled from duty-connected causes becomes eligible to receive a duty disability allowance computed in the same manner as an age & service allowance, based upon the earnings record to time of disability but based upon the years of credited service the member would have completed had the member continued in LAGERS-covered employment to age 60.

**Death-in-Service.** Section 70.661. Upon the death of a member who had completed 5 years of credited service, the eligible surviving dependents receive the following benefits:

(a) The surviving spouse receives an allowance equal to the Option A allowance (joint and 75% survivor benefit) computed based upon the deceased members' service & earnings record to time of death.

(b) When no spouse benefit is payable, the dependent children under age 18 (age 23 if they are full-time students) each receive an equal share of 60% of an age & service allowance computed based upon the deceased member's service & earnings record to time of death.

(c) If the death is determined to be duty related, the 5 year service requirement is waived and the benefit is based on years of credited service the member would have completed had the member continued in LAGERS-covered employment to age 60.

***Benefit Changes After Retirement.*** Section 70.655. For retirements effective after September 28, 1975, there is an annual redetermination of monthly benefit amount, beginning the October first following 12 months of retirement. As of each October first the amount of each eligible benefit is redetermined as follows:

(a) Subject to the maximum in (b), the redetermined amount is the amount otherwise payable multiplied by: 100% plus up to 4%, as determined by the LAGERS Board of Trustees, for each full year of retirement.

(b) The redetermined amount may not exceed the amount otherwise payable multiplied by the ratio of the Consumer Price Index for the immediately preceding month of June to the Consumer Price Index for the month of June immediately preceding retirement.

***Member Contributions.*** Sections 70.690 & 70.700. Each member contributes 4% of compensation beginning after completion of sufficient employment of 6 months of credited service.

If a member leaves LAGERS-covered employment before an allowance is payable, the accumulated contributions are refunded to the member. If the member dies, his accumulated contributions are refunded to a designated beneficiary.

The law governing LAGERS also has a provision for the adoption of a non-contributory plan in which the full cost of LAGERS participation is paid by the employer. Adoption of the non-contributory provisions may be done at the time of membership or a later date; however, a change from contributory to non-contributory or vice-versa may not be made more frequently than every 5 years. Under the non-contributory provisions there is no individual account maintained for each employee and no refund of contributions if an employee terminates before being eligible for a benefit.

***Employer Contributions.*** Section 70.730. Each employer contributes the remainder amounts necessary to finance the employees' participation in LAGERS. Contributions to LAGERS are determined based upon level-percent-of-payroll principles, so that contribution rates do not have to increase over decades of time.



## Benefit Programs in Effect as of February 28, 2006

*Benefit programs now available* to each employer are:

L-1, since 1967	LT-8(65), since 1994
L-3, since 1975	L-9, since 1995
LT-4, since 1977	LT-10(65) since 1995
LT-4(65), since 1994	L-11, since 2000
LT-5, since 1977	L-12, since 2005
LT-5(65), since 1994	LT-14(65), since 2005
L-6, since 1987	Non-Contributory, since 1983
L-7, since 1988	3 Year Final Average Salary (FAS), since 1984
LT-8, since 1988	Rule of 80, since 1988

The only LT benefit programs that can be adopted after August 1, 1994 are the LT(65) programs. Benefit programs L-9 and LT-10(65) are unavailable for adoption after August 1, 2005. Please see pages D-1 through D-3 for a summary of LAGERS provisions.

When the 2006 actuarial valuations were made, the Benefit Programs evaluated were as follows:

FAS	Groups	Benefit Programs																								Totals
		Non-Contributory												Contributory												
		L-1	L-3	LT-4	LT-5	L-6	L-7	LT-8	L-9	LT-10	L-11	L-12	LT-14	L-1	L-3	LT-4	LT-5	L-6	L-7	LT-8	L-9	LT-10	L-11	L-12	LT-14	
5 yr.	General	45	28	1	6	14	38	10	7	2		1	2	46	26	1		8	10	3	5	1		1	1	256
	Police	24	13	1	3	9	26	5	4			1		21	13			4	6	2	2	1		1	1	137
	Fire	3	2	—	2	3	6	4	—	—		1	—	2	4	—		1	—	—	—	—	1	—	29	
	Totals	72	43	2	11	26	70	19	11	2		3	2	69	43	1		13	16	5	7	2		3	2	422
3 yr.	General	12	18		5	29	62	26	17	10	1	3	3	19	16		2	14	29	6	6	2		1		281
	Police	7	9		5	13	29	19	12	6		2	2	6	4		2	10	12	3	3		1		145	
	Fire	1	1		3	5	7	10	3	3	1	—	1	—	1		2	1	3	—	—	—	—	—	42	
	Totals	20	28		13	47	98	55	32	19	2	5	6	25	21		6	25	44	9	9	2		2		468

*The above LT columns include both the LT(62) and LT(65) benefit programs. The table includes 25 groups with no active members.*

**Section E**  

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**Participant Data**



## Participating Employers Evaluated February 28, 2006

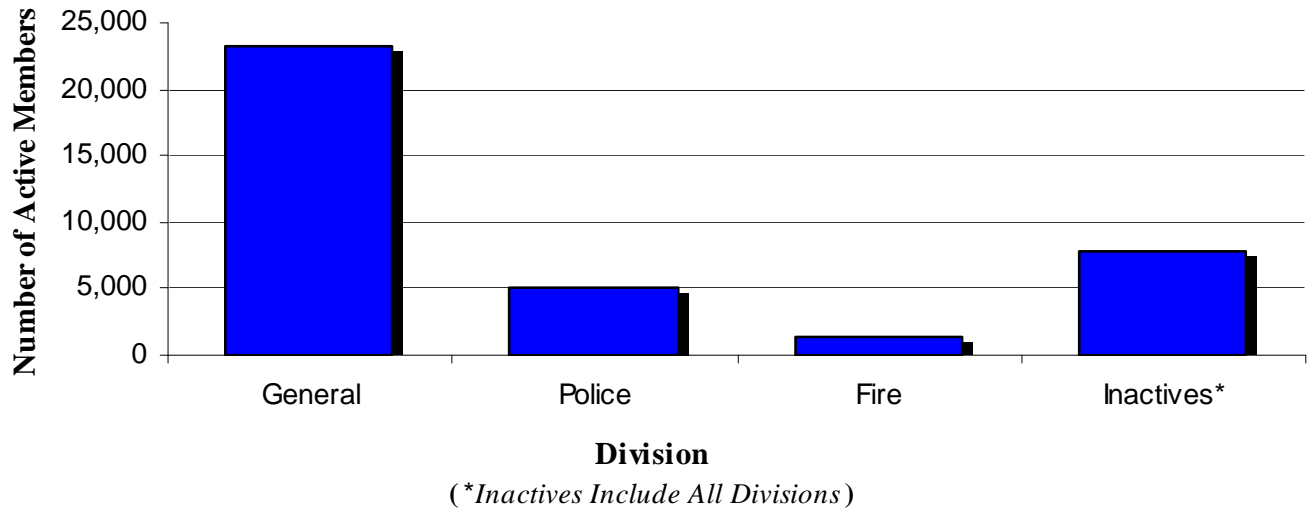
Type of Group	Number of Participating Employers
General Only	245
Fire Only	5
General and Police	216
General and Fire	7
General and Police and Fire	54
<b>Total</b>	<b>527</b>

## Active and Inactive Members in Valuations February 28, 2006

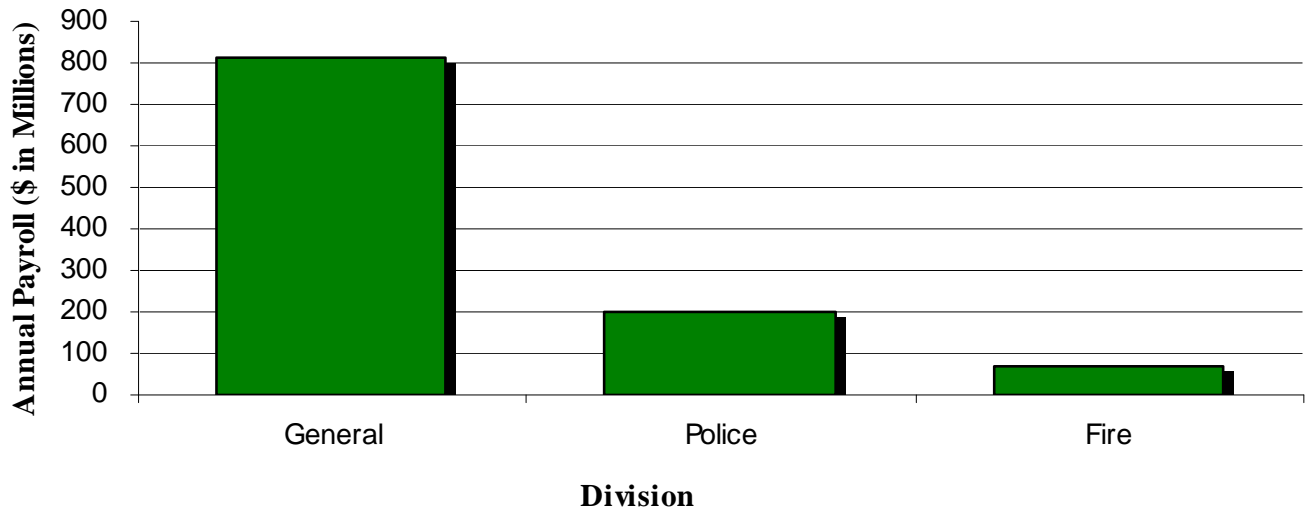
Classification	Number of		Annual Payroll
	Members	Valuation Groups*	
Active Members			
General	23,326	529	\$812,116,244
Police	5,150	270	201,667,131
Fire	<u>1,464</u>	<u>66</u>	<u>68,566,160</u>
Total Actives	29,940	865	\$1,082,349,535
Inactive Members	<u>7,745</u>		
Total Members	37,685		

\* Each Police group and each Fire group is evaluated separately. Each General group is evaluated separately, but also may be broken into sub-groups for separate financial experience if the employer desires separate employer rates for internal accounting purposes.

### Missouri LAGERS Active Members by Division

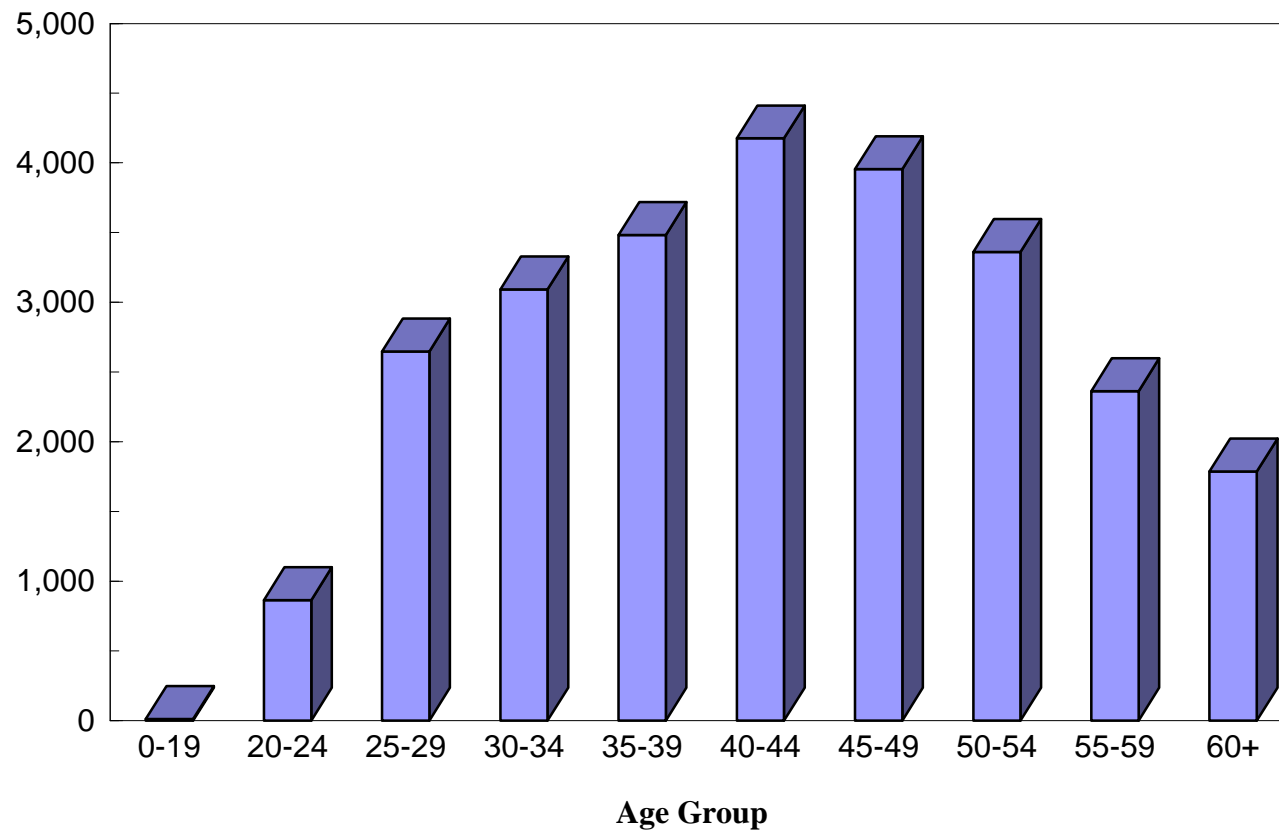


### Missouri LAGERS Annual Payroll by Division

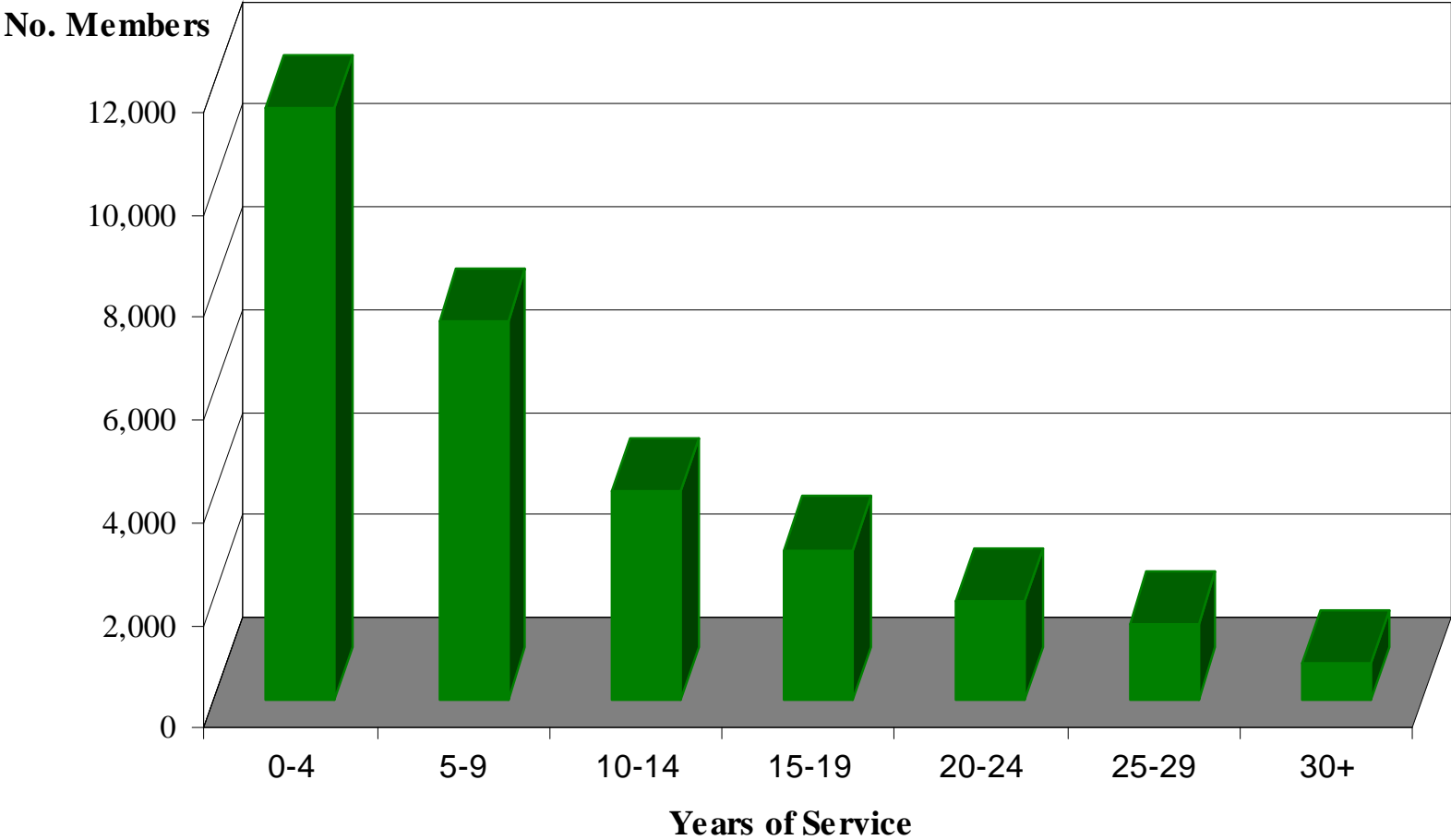


**Missouri LAGERS  
Distribution of Active Members  
By Age  
February 28, 2006**

**No. Members**



**Missouri LAGERS  
Distribution of Active Members  
By Service  
February 28, 2006**



**GENERAL MEMBERS**  
**MEN Active Members February 28, 2006**  
**By Attained Age and Years of Service**

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
Under 20	5							5	\$ 106,201
20-24	403	12						415	10,023,439
25-29	779	236	3					1,018	30,536,918
30-34	602	414	119	1				1,136	39,782,424
35-39	594	454	267	102	3			1,420	53,907,578
40-44	588	437	298	280	134	6		1,743	68,715,924
45-49	538	482	305	268	262	247	13	2,115	84,620,387
50-54	474	396	296	248	245	303	106	2,068	86,125,377
55-59	399	285	246	223	184	171	167	1,675	70,257,701
60	63	40	34	30	27	18	19	231	8,499,882
61	42	43	31	31	26	18	18	209	7,939,411
62	48	49	30	36	19	20	24	226	8,597,047
63	44	34	14	20	12	10	11	145	5,246,695
64	32	22	18	16	7	4	7	106	3,885,463
65	20	22	9	10	9	12	5	87	3,520,336
66	13	16	4	8	2	2	3	48	1,567,896
67	17	10	10	6	4	0	4	51	1,409,954
68	8	15	6	5	3	3	1	41	1,592,666
69	9	10	10	3	1	2	3	38	1,205,560
70 & Over	20	30	17	16	11	6	5	105	3,415,467
<b>Totals</b>	<b>4,698</b>	<b>3,007</b>	<b>1,717</b>	<b>1,303</b>	<b>949</b>	<b>822</b>	<b>386</b>	<b>12,882</b>	<b>\$490,956,326</b>

While not used in the financial computations, the following *group averages* are computed and shown because of their general interest.

Age: 45.3 years  
Service: 10.3 years  
Annual Pay: \$38,112

**GENERAL MEMBERS**  
**WOMEN Active Members February 28, 2006**  
**By Attained Age and Years of Service**

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
Under 20	1							1	\$ 18,011
20-24	289	7						296	6,284,633
25-29	662	141	2					805	21,068,694
30-34	552	310	72	5				939	27,621,422
35-39	573	385	173	63	2			1,196	37,490,017
40-44	567	388	207	149	53	1		1,365	42,556,312
45-49	558	488	287	184	103	91	4	1,715	55,090,920
50-54	477	436	291	207	117	107	35	1,670	54,815,862
55-59	353	359	246	195	125	82	61	1,421	45,441,531
60	49	48	31	31	17	9	6	191	5,971,839
61	37	38	21	26	10	12	4	148	4,471,817
62	34	42	33	15	24	15	8	171	5,185,552
63	24	34	25	25	13	5	7	133	3,914,795
64	14	22	23	14	6	4	9	92	2,800,140
65	5	18	18	18	8	9	3	79	2,327,726
66	9	17	12	6	1	4	3	52	1,500,569
67	8	4	5	3	2	4	3	29	817,470
68	6	10	6	2	2	3	1	30	882,896
69	4	7	6	4	0	2	2	25	548,820
70 & Over	6	15	25	14	9	5	12	86	2,350,892
<b>Totals</b>	<b>4,228</b>	<b>2,769</b>	<b>1,483</b>	<b>961</b>	<b>492</b>	<b>353</b>	<b>158</b>	<b>10,444</b>	<b>\$321,159,918</b>

While not used in the financial computations, the following *group averages* are computed and shown because of their general interest.

Age: 45.5 years  
Service: 8.7 years  
Annual Pay: \$30,751



**POLICE Active Members February 28, 2006**  
**By Attained Age and Years of Service**

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	184	0						184	\$ 5,069,645
25-29	649	116	0					765	24,295,087
30-34	530	440	58	0				1,028	37,343,616
35-39	335	314	234	40	0			923	36,787,017
40-44	173	139	122	147	40	0		621	25,951,066
45-49	106	85	77	112	124	38	0	542	24,486,065
50-54	96	86	82	78	94	100	14	550	24,887,302
55-59	72	45	47	47	43	35	41	330	14,445,670
60	9	4	6	15	6	6	3	49	2,013,961
61	8	12	4	6	4	1	5	40	1,691,213
62	5	8	5	3	1	1	5	28	1,213,983
63	5	6	6	6	6	0	3	32	1,290,320
64	1	5	2	3	0	0	2	13	579,814
65	0	1	4	2	1	2	1	11	440,124
66	1	3	3	0	2	0	1	10	398,533
67	1	2	4	2	1	1	0	11	364,121
68	0	1	1	1	0	0	0	3	137,888
69	0	0	0	0	0	0	0	0	0
70 & Over	0	4	3	2	0	1	0	10	271,706
<b>Totals</b>	<b>2,175</b>	<b>1,271</b>	<b>658</b>	<b>464</b>	<b>322</b>	<b>185</b>	<b>75</b>	<b>5,150</b>	<b>\$201,667,131</b>

While not used in the financial computations, the following *group averages* are computed and shown because of their general interest.

Age: 39.6 years  
Service: 8.7 years  
Annual Pay: \$39,159

**FIRE Active Members February 28, 2006  
By Attained Age and Years of Service**

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	38	0						38	\$ 1,210,400
25-29	104	34	0					138	4,973,985
30-34	123	105	21	1				250	10,439,199
35-39	87	108	64	23	0			282	12,427,059
40-44	30	44	68	72	20	1		235	11,633,132
45-49	12	20	24	51	68	25	0	200	10,480,948
50-54	4	10	21	31	45	58	23	192	10,528,267
55-59	5	2	11	9	14	24	37	102	5,573,132
60	0	0	1	0	0	1	4	6	271,370
61	0	0	1	0	1	0	3	5	235,299
62	0	1	1	0	0	3	0	5	247,139
63	0	0	0	1	0	1	1	3	164,680
64	0	0	0	0	0	0	0	0	0
65	0	0	1	0	0	0	0	1	52,085
66	0	1	0	1	1	0	1	4	220,583
67	0	0	0	0	0	1	0	1	31,684
68	0	0	0	0	0	0	0	0	0
69	0	0	0	0	0	0	0	0	0
70 & Over	1	1	0	0	0	0	0	2	77,198
<b>Totals</b>	<b>404</b>	<b>326</b>	<b>213</b>	<b>189</b>	<b>149</b>	<b>114</b>	<b>69</b>	<b>1,464</b>	<b>\$68,566,160</b>

While not used in the financial computations, the following *group averages* are computed and shown because of their general interest.

Age: 40.9 years  
Service: 12.3 years  
Annual Pay: \$46,835

## Participating Employers and Members in Valuations 10 Year Comparative Statement

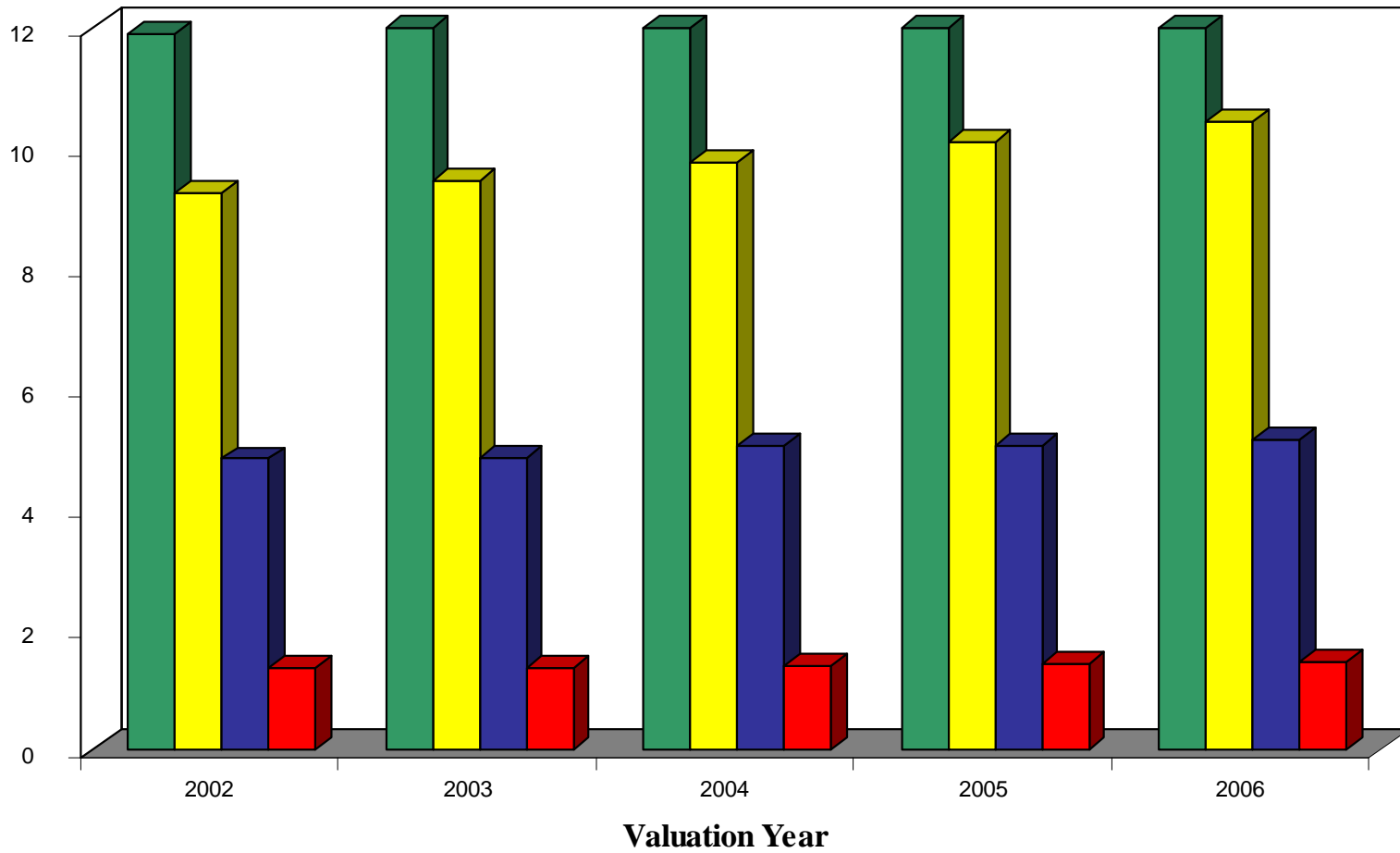
Valuation Date	Number of		Active Members				Inflation Increase % (C.P.I.)
	Participating Employers	Valuation Groups	Number	Annual Payroll	Average Pay	% Increase	
2-28-1997	398	686	23,924	\$627,184,823	\$26,216	3.8%	3.0%
2-28-1998	415	711	24,767	667,085,761	26,934	2.7	1.4
2-28-1999	432	731	25,391	716,154,828	28,205	4.7	1.6
2-29-2000	443	747	25,747	757,753,142	29,431	4.3	3.2
2-28-2001	463	777	26,423	808,959,105	30,616	4.0	3.5
2-28-2002	477	791	27,328	875,061,292	32,021	4.6	1.1
2-28-2003	486	803	27,809	932,953,679	33,549	4.8	3.0
2-29-2004	499	828	28,761	989,446,058	34,402	2.5	1.7
2-28-2005	514	846	29,281	1,031,415,223	35,225	2.4	3.0
2-28-2006	527	865	29,940	1,082,349,535	36,151	2.6	3.6
			10 Year Compound Average			3.6	2.5

**Active Members in Valuations - Group Averages**  
 (averages not used in valuations; computed and shown because of general information value)

Employee Type	Valuation at 2-28	No. of Members	----- Group Averages -----		Annual Payroll Average	Change	Inflation Increase % (C.P.I)
			Completed Years Age	Service			
General - Men	1997	10,694	43.5	10.1	\$ 28,327	+3.7%	+3.0%
	1998	10,955	43.8	10.2	28,943	+2.2	+1.4
	1999	11,109	44.0	10.3	30,325	+4.8	+1.6
	2000	11,250	44.2	10.2	31,583	+4.1	+3.2
	2001	11,576	44.4	10.2	32,769	+3.8	+3.5
	2002	11,895	44.5	10.2	34,171	+4.3	+1.1
	2003	12,138	44.7	10.2	35,744	+4.6	+3.0
	2004	12,556	44.9	10.2	36,412	+1.9	+1.7
	2005	12,701	45.1	10.3	37,124	+2.0	+3.0
	2006	12,882	45.3	10.3	38,112	+2.7	+3.6
General - Women	1997	7,834	43.1	7.8	21,730	+3.6	+3.0
	1998	8,227	43.2	7.8	22,412	+3.1	+1.4
	1999	8,491	43.3	7.9	23,406	+4.4	+1.6
	2000	8,543	43.7	8.0	24,551	+4.9	+3.2
	2001	8,793	44.1	8.0	25,716	+4.7	+3.5
	2002	9,260	44.3	8.0	26,924	+4.7	+1.1
	2003	9,461	44.6	8.2	28,220	+4.8	+3.0
	2004	9,765	45.0	8.4	29,222	+3.6	+1.7
	2005	10,108	45.1	8.6	30,001	+2.7	+3.0
	2006	10,444	45.5	8.7	30,751	+2.5	+3.6
Police	1997	4,173	38.7	7.8	27,318	+5.0	+3.0
	1998	4,330	38.7	7.8	28,545	+4.5	+1.4
	1999	4,492	38.6	7.9	29,926	+4.8	+1.6
	2000	4,654	38.8	8.0	30,996	+3.6	+3.2
	2001	4,720	38.8	8.0	32,307	+4.2	+3.5
	2002	4,831	38.9	8.1	34,034	+5.3	+1.1
	2003	4,841	39.0	8.3	35,822	+5.3	+3.0
	2004	5,049	39.4	8.4	36,895	+3.0	+1.7
	2005	5,041	39.5	8.6	38,074	+3.2	+3.0
	2006	5,150	39.6	8.7	39,159	+2.8	+3.6
Fire	1997	1,223	39.5	11.7	32,729	+2.8	+3.0
	1998	1,255	39.4	11.7	33,491	+2.3	+1.4
	1999	1,299	39.6	11.7	35,490	+6.0	+1.6
	2000	1,300	39.6	11.8	37,275	+5.0	+3.2
	2001	1,334	39.8	11.9	38,242	+2.6	+3.5
	2002	1,342	40.1	12.1	40,876	+6.9	+1.1
	2003	1,369	40.4	12.2	42,873	+4.9	+3.0
	2004	1,391	40.4	12.1	43,582	+1.7	+1.7
	2005	1,431	40.6	12.2	45,230	+3.8	+3.0
	2006	1,464	40.9	12.3	46,835	+3.5	+3.6

# Missouri LAGERS Active Members 2002 - 2006

Members (Thousands)



■ General - Men ■ General - Women ■ Police ■ Fire

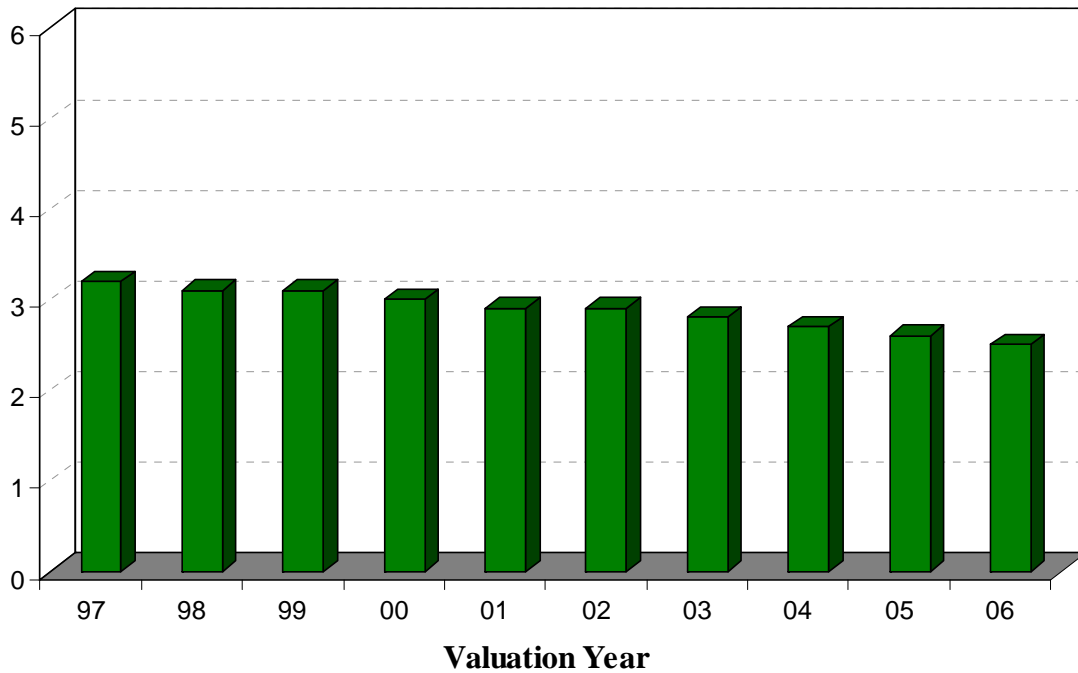
## Retirants and Beneficiaries Added to and Removed from Rolls 10 Year Comparative Statement

Year Ended	Added to Rolls		Removed from Rolls		Rolls End of Year		% Incr. in Annual Allowances	Average Annual Allowances	Retired Lives in Relation to Active Members	
	No.	Annual Allowances*	No.	Annual Allowances	No.	Annual Allowances			Active Members Per Benefit Recipient	Allowances as Percents of Active Payroll
2-28-1997	695	\$5,656,604	275	\$ 1,239,056	7,461	\$36,759,417	13.7%	\$4,927	3.2	5.9%
2-28-1998	741	6,251,387	315	1,411,336	7,887	41,599,468	13.2	5,274	3.1	6.2
2-28-1999	748	6,620,521	339	1,854,143	8,296	46,365,846	11.5	5,589	3.1	6.5
2-29-2000	769	7,394,519	371	1,839,075	8,694	51,921,290	12.0	5,972	3.0	6.9
2-28-2001	816	8,094,550	330	2,026,823	8,782	52,433,573	11.7	5,971	2.9	7.2
2-28-2002	806	9,203,832	385	2,191,355	9,601	65,001,494	12.1	6,770	2.9	7.4
2-28-2003	870	9,313,332	364	2,545,321	10,107	71,769,505	10.4	7,101	2.8	7.7
2-29-2004	898	10,540,515	399	2,844,252	10,606	79,465,768	10.7	7,493	2.7	8.0
2-28-2005	1,073	11,939,122	447	3,449,898	11,232	87,954,992	10.7	7,831	2.6	8.5
2-28-2006	976	12,115,168	421	2,810,718	11,787	97,259,442	10.6	8,251	2.5	9.0

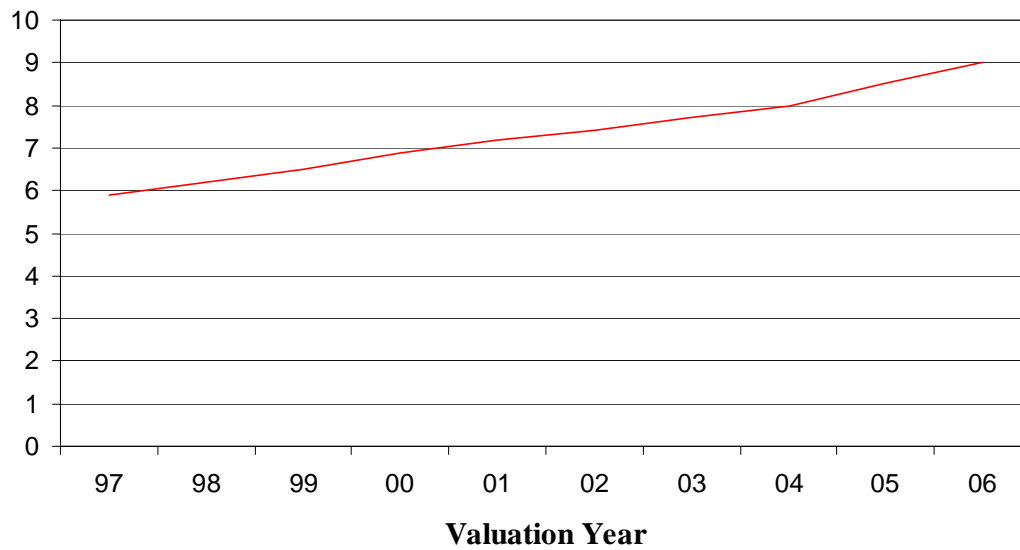
\* Includes post-retirement adjustments.

## Retirants and Beneficiaries Comparative Data

### Active Members Per Benefit Recipient



### Allowances as % of Active Pay



**Retirants and Beneficiaries on Rolls February 28, 2006  
By Disbursing Fund and Type of Benefit Being Paid**

Type of Benefit	Number	Annual Allowances
Service Early & Deferred		
Life Option	5,427	\$43,671,427
Option A	1,662	16,069,841
Option B	1,089	14,256,091
Option C	1,040	7,403,079
Beneficiary Receiving	<u>941</u>	<u>4,337,174</u>
Totals	10,159	85,737,612
Duty Disability		
Life Option	252	3,242,239
Option A	99	1,055,116
Option B	43	536,400
Option C	<u>29</u>	<u>329,298</u>
Totals	423	5,163,053
Non-Duty Disability		
Life Option	231	1,541,931
Option A	103	725,611
Option B	47	424,645
Option C	<u>59</u>	<u>374,344</u>
Totals	440	3,066,531
Beneficiary receiving	<u>176</u>	<u>771,170</u>
Total Disability	1,039	9,000,754
Death-In-Service		
Spouse Receiving	548	2,424,176
Children Receiving	<u>41</u>	<u>96,900</u>
Totals	589	2,521,076
<b>Totals</b>	<b>11,787</b>	<b>\$97,259,442</b>



## **Section F**

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### **Computed Employer Contributions: Summary of Computed Employer Contribution Rates**

**Computed Employer Contributions: Non-Contributory Plans**  
**5 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program L-1</b>									
General:	1-9	2	5	3	6	4	2	1	23
	10-49	8	5	5	1	1			20
	50 & up	—	—	<u>1</u>	<u>1</u>	—	—	—	<u>2</u>
	Totals	10	10	9	8	5	2	1	45
Police:	1-9	4	4	4		2		2	16
	10-49	6	1			1			8
	50 & up	—	—	—		—		—	—
	Totals	10	5	4		3		2	24
Fire:	1-9	1							1
	10-49	2							2
	50 & up	—							—
	Totals	3							3
Totals:		23	15	13	8	8	2	3	72
<b>Benefit Program L-3</b>									
General:	1-9	6		3	1	1	3		14
	10-49	3	1	3	3		1		11
	50 & up	<u>3</u>	—	—	—	—	—		<u>3</u>
	Totals	12	1	6	4	1	4		28
Police:	1-9	4		1	1		1	1	8
	10-49	2			2	1			5
	50 & up	—		—	—	—	—	—	—
	Totals	6		1	3	1	1	1	13
Fire:	1-9		1			1			2
	10-49								
	50 & up		—			—			—
	Totals		1			1			2
Totals		18	2	7	7	3	5	1	43

\* Dollar contribution rates for groups presently without active members.

**Computed Employer Contributions: Non-Contributory Plans**  
**5 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**  
*(Continued)*

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program LT-4 (62 or 65)</b>									
General:	1-9					1			1
	10-49					—			—
	50 & up					—			—
	Totals					1			1
Police:	1-9				1				1
	10-49								
	50 & up				—				—
	Totals				1				1
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals:				1	1				2
<b>Benefit Program LT-5 (62 or 65)</b>									
General:	1-9		1	1					2
	10-49			1					1
	50 & up		2	—		1			3
	Totals		3	2		1			6
Police:	1-9	1							1
	10-49			2					2
	50 & up	—		—					—
	Totals	1		2					3
Fire:	1-9								
	10-49					2			2
	50 & up					—			—
	Totals					2			2
Totals		1	3	4		3			11

\* Dollar contribution rates for groups presently without active members.

The above totals include both the LT(62) and LT(65) benefit programs. Of the 2 LT-4 benefit programs, 0 are LT-4(62) and 2 are LT-4(65). Of the 11 LT-5 benefit programs, 1 is LT-5(62) and 10 are LT-5(65).

**Computed Employer Contributions: Non-Contributory Plans**  
**5 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**  
*(Continued)*

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program L-6</b>									
General:	1-9	1					2		3
	10-49						7		7
	50 & up	—				<u>2</u>	<u>2</u>		<u>4</u>
	Totals	1				2	11		14
Police:	1-9								
	10-49	1				2	4		7
	50 & up	—				—	<u>2</u>		<u>2</u>
	Totals	1				2	6		9
Fire:	1-9						1		1
	10-49								
	50 & up						<u>2</u>		<u>2</u>
	Totals						3		3
Totals:		2				4	20		26
<b>Benefit Program L-7</b>									
General:	1-9	3		2		1	5		11
	10-49	3	3	1	4	2	3		16
	50 & up	<u>1</u>	<u>2</u>	<u>4</u>	<u>3</u>	<u>1</u>	—		<u>11</u>
	Totals	7	5	7	7	4	8		38
Police:	1-9	4		3	1	1	1	1	11
	10-49	4	4	4	1	2			15
	50 & up	—	—	—	—	—	—	—	—
	Totals	8	4	7	2	3	1	1	26
Fire:	1-9							1	1
	10-49	2	1	1		1			5
	50 & up	—	—	—		—		—	—
	Totals	2	1	1		1		1	6
Totals		17	10	15	9	8	9	2	70

\* Dollar contribution rates for groups presently without active members.

**Computed Employer Contributions: Non-Contributory Plans**  
**5 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**  
*(Continued)*

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program LT-8 (62 or 65)</b>									
General:	1-9	1			1	1	1		4
	10-49					1	1		2
	50 & up	—	$\frac{1}{1}$	$\frac{2}{2}$	$\frac{1}{2}$	—	—		$\frac{4}{4}$
	Totals	1	1	2	2	2	2		10
Police:	1-9				1		1		2
	10-49		1	1					2
	50 & up		—	—	—	$\frac{1}{1}$	—		$\frac{1}{1}$
	Totals		1	1	1	1	1		5
Fire:	1-9						1		1
	10-49				2	1			3
	50 & up				—	—	—		—
	Totals				2	1	1		4
Totals:		1	2	3	5	4	4		19
<b>Benefit Program L-9</b>									
General:	1-9	2	1						3
	10-49					2	2		4
	50 & up	—	—			—	—		—
	Totals	2	1			2	2		7
Police:	1-9		1	1					2
	10-49	1		1					2
	50 & up	—	—	—					—
	Totals	1	1	2					4
Fire:	1-9								
	10-49								
	50 & up								
	Totals								0
Totals		3	2	2		2	2		11

\* Dollar contribution rates for groups presently without active members.

The above totals include both the LT(62) and LT(65) benefit programs. Of the 19 LT-8 benefit programs, 6 are LT-8(62) and 13 are LT-8(65).

**Computed Employer Contributions: Non-Contributory Plans**  
**5 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**  
*(Concluded)*

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program LT-10(65)</b>									
General:	1-9		1				1		2
	10-49								
	50 & up		—				—		—
	Totals		1				1		2
Police:	1-9								
	10-49								
	50 & up								—
	Totals								0
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals:		1				1		2	
<b>Benefit Program L-11</b>									
General:	1-9								
	10-49								
	50 & up								—
	Totals								0
Police:	1-9								
	10-49								
	50 & up								—
	Totals								0
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals:								0	

\* Dollar contribution rates for groups presently without active members.

**Computed Employer Contributions: Non-Contributory Plans**  
**5 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**  
*(Concluded)*

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program L-12</b>									
General:	1-9								
	10-49								
	50 & up			$\frac{1}{1}$					$\frac{1}{1}$
	Totals			$\frac{1}{1}$					$\frac{1}{1}$
Police:	1-9								
	10-49	1							1
	50 & up	—							—
	Totals	1							1
Fire:	1-9								
	10-49	1							1
	50 & up	—							—
	Totals	1							1
Totals:		2		1					3
<b>Benefit Program LT-14(65)</b>									
General:	1-9								
	10-49								
	50 & up				$\frac{1}{1}$		$\frac{1}{1}$		$\frac{2}{2}$
	Totals				$\frac{1}{1}$		$\frac{1}{1}$		$\frac{2}{2}$
Police:	1-9								
	10-49								
	50 & up								—
	Totals								0
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals:				1		1			2

\* Dollar contribution rates for groups presently without active members.

**Computed Employer Contributions: Contributory Plans**  
**5 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program L-1</b>									
General:	1-9	16	5	5	1	2	1	1	31
	10-49	9	2	2					13
	50 & up	<u>2</u>	—	—	—	—	—	—	<u>2</u>
	Totals	27	7	7	1	2	1	1	46
Police:	1-9	9	2	4	1			2	18
	10-49	2	1						3
	50 & up	—	—	—	—			—	—
	Totals	11	3	4	1			2	21
Fire:	1-9			1		1			2
	10-49								
	50 & up			—		—			—
	Totals			1		1			2
Totals:		38	10	12	2	3	1	3	69
<b>Benefit Program L-3</b>									
General:	1-9	2	1	8	2	2			15
	10-49	4	5	1					10
	50 & up	<u>1</u>	—	—	—	—			<u>1</u>
	Totals	7	6	9	2	2			26
Police:	1-9	2	4	1					7
	10-49	4	2						6
	50 & up	—	—	—					—
	Totals	6	6	1					13
Fire:	1-9	1			1			1	3
	10-49			1					1
	50 & up	—		—	—			—	—
	Totals	1		1	1			1	4
Totals		14	12	11	3	2		1	43

\* Dollar contribution rates for groups presently without active members.



**Computed Employer Contributions: Contributory Plans**  
**5 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**  
*(Continued)*

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program LT-4 (62 or 65)</b>									
General:	1-9						1		1
	10-49								
	50 & up						—		—
	Totals						1		1
Police:	1-9								
	10-49								
	50 & up								—
	Totals								0
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals:						1		1	
<b>Benefit Program LT-5 (62 or 65)</b>									
General:	1-9								
	10-49								
	50 & up								—
	Totals								0
Police:	1-9								
	10-49								
	50 & up								—
	Totals								0
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals								0	

\* Dollar contribution rates for groups presently without active members.

The above totals include both the LT(62) and LT(65) benefit programs. Of the 1 LT-4 benefit program, 0 are LT-4(62) and 1 is LT-4(65).

**Computed Employer Contributions: Contributory Plans**  
**5 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**  
*(Continued)*

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program L-6</b>									
General:	1-9								
	10-49	2		1	1	1			5
	50 & up	—	$\frac{1}{1}$	—	$\frac{2}{2}$	—			$\frac{3}{3}$
	Totals	2	1	1	3	1			8
Police:	1-9								
	10-49	2		1					3
	50 & up	—		—	$\frac{1}{1}$				$\frac{1}{1}$
	Totals	2		1	1				4
Fire:	1-9	1							1
	10-49								
	50 & up	—							—
	Totals	1							1
Totals:		5	1	2	4	1			13
<b>Benefit Program L-7</b>									
General:	1-9	1	1				2		4
	10-49	3	2		1				6
	50 & up	—	—		—		—		—
	Totals	4	3		1		2		10
Police:	1-9	4		1	1				6
	10-49								
	50 & up	—		—	—				—
	Totals	4		1	1				6
Fire:	1-9								
	10-49								
	50 & up								
	Totals								0
Totals		8	3	1	2		2		16

\* Dollar contribution rates for groups presently without active members.

**Computed Employer Contributions: Contributory Plans**  
**5 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**  
*(Continued)*

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program LT-8 (62 or 65)</b>									
General:	1-9				1				1
	10-49	2							2
	50 & up	—			—				—
	Totals	2			1				3
Police:	1-9	1							1
	10-49	1							1
	50 & up	—							—
	Totals	2							2
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals:		4			1				5
<b>Benefit Program L-9</b>									
General:	1-9	1		1			1		3
	10-49	2							2
	50 & up	—		—			—		—
	Totals	3		1			1		5
Police:	1-9	1					1		2
	10-49								
	50 & up	—					—		—
	Totals	1					1		2
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals		4		1			1	1	7

\* Dollar contribution rates for groups presently without active members.

The above totals include both the LT(62) and LT(65) benefit programs. Of the 5 LT-8 benefit programs, 2 are LT-8(62) and 3 are LT-8(65).

**Computed Employer Contributions: Contributory Plans**  
**5 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**  
*(Concluded)*

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program LT-10(65)</b>									
General:	1-9								
	10-49			1					1
	50 & up			—					—
	Totals			1					1
Police:	1-9		1						1
	10-49								
	50 & up		—						—
	Totals		1						1
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals:		1	1						2
<b>Benefit Program L-11</b>									
General:	1-9								
	10-49								
	50 & up								—
	Totals								0
Police:	1-9								
	10-49								
	50 & up								—
	Totals								0
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals:									0

\* Dollar contribution rates for groups presently without active members.

**Computed Employer Contributions: Contributory Plans**  
**5 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**  
*(Concluded)*

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program L-12</b>									
General:	1-9								
	10-49	1							1
	50 & up	—							—
	Totals	1							1
Police:	1-9	1							1
	10-49								
	50 & up	—							—
	Totals	1							1
Fire:	1-9			1					1
	10-49								
	50 & up			—					—
	Totals			1					1
Totals:		2		1					3
<b>Benefit Program LT-14(65)</b>									
General:	1-9								
	10-49				1				1
	50 & up				—				—
	Totals				1				1
Police:	1-9	1							1
	10-49								
	50 & up	—							—
	Totals	1							1
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals:		1			1				2

\* Dollar contribution rates for groups presently without active members.

**Computed Employer Contributions: Non-Contributory Plans**  
**3 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program L-1</b>									
General:	1-9	1		2	3		1		7
	10-49	2	1		2				5
	50 & up	—	—	—	—		—		—
	Totals	3	1	2	5		1		12
Police:	1-9	3	2		2				7
	10-49								
	50 & up	—	—		—				—
	Totals	3	2		2				7
Fire:	1-9						1		1
	10-49								
	50 & up						—		—
	Totals						1		1
Totals:		6	3	2	7		2		20
<b>Benefit Program L-3</b>									
General:	1-9	3				1	4		8
	10-49	1	2	3		1	1		8
	50 & up	<u>1</u>	<u>1</u>	—		—	—		<u>2</u>
	Totals	5	3	3		2	5		18
Police:	1-9	2	2			1	1		6
	10-49	1			1	1			3
	50 & up	—	—		—	—	—		—
	Totals	3	2		1	2	1		9
Fire:	1-9				1				1
	10-49								
	50 & up				—				—
	Totals				1				1
Totals		8	5	3	2	4	6		28

\* Dollar contribution rates for groups presently without active members.

**Computed Employer Contributions: Non-Contributory Plans**  
**3 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**  
*(Continued)*

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program LT-4 (62 or 65)</b>									
General:	1-9								
	10-49								
	50 & up								—
	Totals								0
Police:	1-9								
	10-49								
	50 & up								—
	Totals								0
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals:									0
<b>Benefit Program LT-5 (62 or 65)</b>									
General:	1-9						1		1
	10-49		2	1					3
	50 & up	1	—	—			—		1
	Totals	1	2	1			1		5
Police:	1-9	1					1		2
	10-49	3							3
	50 & up	—					—		—
	Totals	4					1		5
Fire:	1-9	1							1
	10-49	1	1						2
	50 & up	—	—						—
	Totals	2	1						3
Totals		7	3	1			2		13

\* Dollar contribution rates for groups presently without active members.

The above totals include both the LT(62) and LT(65) benefit programs. Of the 13 LT-5 benefit programs, 7 are LT-5(62) and 6 are LT-5(65).

**Computed Employer Contributions: Non-Contributory Plans**  
**3 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**  
*(Continued)*

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program L-6</b>									
General:	1-9			1			3	1	5
	10-49			1	1	2	5		9
	50 & up			—	<u>1</u>	<u>2</u>	<u>12</u>	—	<u>15</u>
	Totals			2	2	4	20	1	29
Police:	1-9	1					1		2
	10-49		1		2	2	3		8
	50 & up	—	—		—	—	<u>3</u>		<u>3</u>
	Totals	1	1		2	2	7		13
Fire:	1-9	1					1	1	3
	10-49						1		1
	50 & up	—					<u>1</u>	—	<u>1</u>
	Totals	1					3	1	5
Totals:		2	1	2	4	6	30	2	47
<b>Benefit Program L-7</b>									
General:	1-9		1	1	2	1	10	3	18
	10-49	4	7	2	5	4			22
	50 & up	<u>2</u>	<u>4</u>	<u>8</u>	<u>5</u>	<u>1</u>	<u>2</u>	—	<u>22</u>
	Totals	6	12	11	12	6	12	3	62
Police:	1-9	2			2			1	5
	10-49	6	3	5	4	2			20
	50 & up	—	<u>2</u>	<u>1</u>	<u>1</u>	—		—	<u>4</u>
	Totals	8	5	6	7	2		1	29
Fire:	1-9	1			1				2
	10-49	1	1	1	1		1		5
	50 & up	—	—	—	—	—	—		—
	Totals	2	1	1	2		1		7
Totals		16	18	18	21	8	13	4	98

\* Dollar contribution rates for groups presently without active members.



**Computed Employer Contributions: Non-Contributory Plans**  
**3 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**  
*(Continued)*

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program LT-8 (62 or 65)</b>									
General:	1-9					1			1
	10-49		1	3	2	3	2		11
	50 & up		<u>1</u>	<u>5</u>	<u>3</u>	<u>3</u>	<u>2</u>		<u>14</u>
	Totals		2	8	5	7	4		26
Police:	1-9					2	2	1	5
	10-49	2	3	2	1	1			9
	50 & up	—	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	—	—	<u>5</u>
	Totals	2	4	4	2	4	2	1	19
Fire:	1-9			1					1
	10-49	1	1	1	1	1	1		6
	50 & up	—	—	—	<u>2</u>	—	<u>1</u>		<u>3</u>
	Totals	1	1	2	3	1	2		10
Totals:		3	7	14	10	12	8	1	55
<b>Benefit Program L-9</b>									
General:	1-9				1		2		3
	10-49			3		2	1		6
	50 & up	<u>1</u>	<u>1</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>1</u>		<u>8</u>
	Totals	1	1	5	3	3	4		17
Police:	1-9			1	2	2			5
	10-49	2	1	1	1				5
	50 & up	—	—	—	<u>1</u>	<u>1</u>			<u>2</u>
	Totals	2	1	2	4	3			12
Fire:	1-9	1							1
	10-49				1		1		2
	50 & up	—			—		—		—
	Totals	1			1		1		3
Totals		4	2	7	8	6	5		32

\* Dollar contribution rates for groups presently without active members.

The above totals include both the LT(62) and LT(65) benefit programs. Of the 55 LT-8 benefit programs, 3 are LT-8(62) and 52 are LT-8(65).

**Computed Employer Contributions: Non-Contributory Plans**  
**3 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**  
*(Concluded)*

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program LT-10(65)</b>									
General:	1-9						2		2
	10-49				2	1	1		4
	50 & up	<u>1</u>			—	<u>3</u>	—		<u>4</u>
	Totals	1			2	4	3		10
Police:	1-9	1							1
	10-49	1				4			5
	50 & up	—				—			—
	Totals	2				4			6
Fire:	1-9				1				1
	10-49						2		2
	50 & up				—		—		—
	Totals				1		2		3
Totals:		3			3	8	5		19
<b>Benefit Program L-11</b>									
General:	1-9						1		1
	10-49								
	50 & up						—		—
	Totals						1		1
Police:	1-9								
	10-49								
	50 & up								—
	Totals								0
Fire:	1-9								
	10-49						1		1
	50 & up						—		—
	Totals						1		1
Totals:							2		2

\* Dollar contribution rates for groups presently without active members.

**Computed Employer Contributions: Non-Contributory Plans**  
**3 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**  
*(Concluded)*

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program L-12</b>									
General:	1-9				1		1		2
	10-49				—		$\frac{1}{2}$		$\frac{1}{2}$
	50 & up				1		2		3
	Totals				1		2		3
Police:	1-9		1				1		2
	10-49								
	50 & up		—				—		—
	Totals		1				1		2
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals:		1		1		3		5	
<b>Benefit Program LT-14(65)</b>									
General:	1-9			2					2
	10-49			—	$\frac{1}{2}$				$\frac{1}{2}$
	50 & up			2	1				3
	Totals			2	1				3
Police:	1-9	1							1
	10-49				1				1
	50 & up	—			—				—
	Totals	1			1				2
Fire:	1-9					1			1
	10-49								
	50 & up					—			—
	Totals					1			1
Totals:		1	2	2	1			6	

\* Dollar contribution rates for groups presently without active members.

**Computed Employer Contributions: Contributory Plans**  
**3 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program L-1</b>									
General:	1-9	5	3	5	2			1	16
	10-49	1	1	1					3
	50 & up	—	—	—	—			—	—
	Totals	6	4	6	2			1	19
Police:	1-9	3	1	1					5
	10-49		1						1
	50 & up	—	—	—					—
	Totals	3	2	1					6
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals:		9	6	7	2			1	25
<b>Benefit Program L-3</b>									
General:	1-9	3	1	2	3				9
	10-49	4	2						6
	50 & up	1	—	—	—				1
	Totals	8	3	2	3				16
Police:	1-9	2							2
	10-49	2							2
	50 & up	—							—
	Totals	4							4
Fire:	1-9			1					1
	10-49								
	50 & up			—					—
	Totals			1					1
Totals		12	3	3	3				21

*\* Dollar contribution rates for groups presently without active members.*

**Computed Employer Contributions: Contributory Plans**  
**3 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**  
*(Continued)*

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program LT-4 (62 or 65)</b>									
General:	1-9								
	10-49								
	50 & up								—
	Totals								0
Police:	1-9								
	10-49								
	50 & up								—
	Totals								0
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals:									0
<b>Benefit Program LT-5 (62 or 65)</b>									
General:	1-9	1							1
	10-49	1							1
	50 & up	—							—
	Totals	2							2
Police:	1-9		1				1		2
	10-49								
	50 & up						—		—
	Totals		1				1		2
Fire:	1-9			1		1			2
	10-49								
	50 & up			—		—			—
	Totals			1		1			2
Totals		2	1	1		1	1		6

\* Dollar contribution rates for groups presently without active members.

The above totals include both the LT(62) and LT(65) benefit programs. Of the 6 LT-5 benefit programs, 0 are LT-5(62) and 6 are LT-5(65).

**Computed Employer Contributions: Contributory Plans**  
**3 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**  
*(Continued)*

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program L-6</b>									
General:	1-9	1		1		1	1	1	5
	10-49	2	1		1				4
	50 & up	—	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{2}{2}$	—	—	$\frac{5}{5}$
	Totals	3	2	2	2	3	1	1	14
Police:	1-9	3	1		1				5
	10-49	1	1	1	1				4
	50 & up	—	—	—	—	$\frac{1}{1}$			$\frac{1}{1}$
	Totals	4	2	1	2	1			10
Fire:	1-9								
	10-49					1			1
	50 & up					—			—
	Totals					1			1
Totals:		7	4	3	4	5	1	1	25
<b>Benefit Program L-7</b>									
General:	1-9	3	4		1	1	3		12
	10-49	3	3	2	2	1			11
	50 & up	$\frac{5}{5}$	—	$\frac{1}{1}$	—	—	—		$\frac{6}{6}$
	Totals	11	7	3	3	2	3		29
Police:	1-9	3	1		1			1	6
	10-49	4		1					5
	50 & up	$\frac{1}{1}$	—	—	—			—	$\frac{1}{1}$
	Totals	8	1	1	1			1	12
Fire:	1-9						1	2	3
	10-49								
	50 & up						—	—	—
	Totals						1	2	3
Totals		19	8	4	4	2	4	3	44

\* Dollar contribution rates for groups presently without active members.

**Computed Employer Contributions: Contributory Plans**  
**3 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**  
*(Continued)*

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program LT-8 (62 or 65)</b>									
General:	1-9		1						1
	10-49	1				1			2
	50 & up	<u>2</u>	—		<u>1</u>	—			<u>3</u>
	Totals	3	1		1	1			6
Police:	1-9							1	1
	10-49	1	1						2
	50 & up	—	—					—	—
	Totals	1	1					1	3
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals:		4	2		1	1		1	9
<b>Benefit Program L-9</b>									
General:	1-9								
	10-49	4	2						6
	50 & up	—	—						—
	Totals	4	2						6
Police:	1-9	1						1	2
	10-49	1							1
	50 & up	—						—	—
	Totals	2						1	3
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals		6	2					1	9

\* Dollar contribution rates for groups presently without active members.

The above totals include both the LT(62) and LT(65) benefit programs. Of the 9 LT-8 benefit programs, 4 are LT-8(62) and 5 is LT-8(65).

**Computed Employer Contributions: Contributory Plans**  
**3 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**  
*(Concluded)*

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program LT-10(65)</b>									
General:	1-9						1		1
	10-49		1						1
	50 & up		—				—		—
	Totals		1				1		2
Police:	1-9								
	10-49								
	50 & up								—
	Totals								0
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals:		1				1		2	
<b>Benefit Program L-11</b>									
General:	1-9								
	10-49								
	50 & up								—
	Totals								0
Police:	1-9								
	10-49								
	50 & up								—
	Totals								0
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals:								0	

\* Dollar contribution rates for groups presently without active members.



**Computed Employer Contributions: Contributory Plans**  
**3 Year Final Average Salary**  
**By Valuation Groups February 28, 2006**  
*(Concluded)*

Group	Number of Active Members	Number of Valuation Groups with Indicated Computed Employer Contributions Expressed as Percents of Active Member Payroll							
		Under 5.00%	5.00% -6.99%	7.00% -8.99%	9.00% -10.99	11.00% -12.99	Over 12.99%	Other*	Totals
<b>Benefit Program L-12</b>									
General:	1-9				1				1
	10-49				—				—
	50 & up								—
	Totals				1				1
Police:	1-9			1					1
	10-49								
	50 & up			—					—
	Totals			1					1
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals:			1	1					2
<b>Benefit Program LT-14(65)</b>									
General:	1-9								
	10-49								
	50 & up								—
	Totals								0
Police:	1-9								
	10-49								
	50 & up								—
	Totals								0
Fire:	1-9								
	10-49								
	50 & up								—
	Totals								0
Totals:									0

\* Dollar contribution rates for groups presently without active members.

**Section G**  

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**Appendix**



**SUMMARY OF  
ASSUMPTIONS USED FOR LAGERS ACTUARIAL VALUATIONS  
Assumptions Adopted by LAGERS Board after Consulting with Actuary**

*The actuarial assumptions used* in making the valuations are shown in this Appendix of the report.

**ECONOMIC ASSUMPTIONS -----**

*The investment return rate* used in making the valuations was 7.5% per year, compounded annually (net after administrative expenses). The real rate of return is the portion of total investment return which is more than the wage inflation rate. Considering wage inflation recognition of 4.0%, the 7.5% investment return rate translates to an assumed real rate of return of 3.5%. No specific price inflation assumption is required to perform the valuations. However, a price inflation assumption on the order of 3.0% to 3.5% would be consistent with the other economic assumptions. Adopted 2001.

*Pay increase assumptions* for individual active members are shown for sample ages on pages G-4 and G-5. Part of the assumption for each age is for merit and/or seniority increase, and the other 4.0% recognizes inflation. Adopted 2006.

*The active member payroll* is assumed to increase 4.0% annually, which is the portion of the individual pay increase assumptions attributable to inflation. Adopted 1987.

*Post-retirement increases* are assumed to be 2.88%, compounded annually.

*The number of active members* per employer is assumed to continue at the present number. Adopted 1967.

**NON-ECONOMIC ASSUMPTIONS -----**

*The mortality table*, for post-retirement mortality, used in evaluating allowances to be paid was the 1971 Group Annuity Mortality Table projected to 2000, set back 1 year for men and 7 years for women. The disability post-retirement rates were equal to the standard rates set forward 10 years. Related values are shown on page G-3. Adopted 2001.

*The probabilities of age and service retirement* are shown on page G-3. Adopted 2006.

*The probabilities of withdrawal from service and death-in-service* are shown for sample ages on pages G-4 and G-5. It is assumed that all contributory members terminating before age 40 or with less than 10 years of service, and a percentage (General: 30%, Police-Fire: 20%) of contributory members terminating after age 40 with 10 or more years service, withdraw their contributions and forfeit any vested employer-financed benefit. The mortality table used to evaluate mortality among active members was the RP-2000 Combined Healthy Table. It was assumed that 50% of pre-retirement deaths would be duty related. Adopted 2006.

**An individual entry age normal cost method of valuation** was used in determining age & service allowance normal costs and the allocation of actuarial present values between service rendered before and after the valuation date. The entry age normal cost method has the following characteristics:

- (i) the annual normal costs for each individual active member, payable from the member's actual date of employment to the member's projected date of retirement are sufficient to accumulate the actuarial present value of the member's benefit at the time of retirement;
- (ii) each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Unfunded accrued liabilities are amortized by level (principal & interest) percent of payroll contributions. Except for amortization of the liabilities associated with the Non-Contributory Refund provision, the minimum amortization period is 15 years. Adopted 1987.

**Contribution rates for disability** retirement are determined using a modified terminal funding method. Contribution rates are periodically adjusted based on the trend of the balance of the Casualty Reserve Fund (CRF). The funding objective is to have assets in the CRF sufficient to cover the portion of the present value of future benefits for future disability retired lives not covered by past normal cost contributions for the disabled member. Adopted 1967.

**Future service credit** is always assumed to accrue at the rate of 1 year of credit every 12 calendar months. Lower service accrual rates (service breaks or less-than-full-time employment) or higher service accrual rates (addition of military credit or reinstatement of prior service) are reflected as they are reported. Any lower or higher accrual rates may result in small financial gains or losses when reported. Adopted 1967.

**The form of benefit payment** assumed in the valuation is the Life Option. However, for members with accumulated member contributions, the residual refund available upon an early death after retirement is approximated by assuming pension payments are made for at least 3 years. Adopted 1967.

**Employer contribution dollars** were assumed to be *paid in equal installments* throughout the employer fiscal year. Adopted 1967.

**The Funding Value of Assets** recognize assumed investment return fully each year. Differences between actual and assumed investment return are phased in over a closed 5-year period. Funding value is not permitted to deviate from market value by more than 20%. Adopted 1995 and 2003, respectively.

**The data about persons now covered and about present assets** were furnished by the System's administrative staff. Although examined for general reasonableness, the data was not audited by the Actuary.

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

**Single Life Retirement Values**  
**(1971 Group Annuity Mortality Table projected to 2000,**  
**setback 1 year for men and 7 years for women, & i = .075)**

Sample Attained Ages	Present Value of \$1.00			
	Monthly Increasing for Life		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	\$185.17	\$202.01	29.17	34.67
55	169.34	188.14	24.82	30.06
60	151.70	172.64	20.70	25.67
65	132.43	155.38	16.82	21.50
70	112.65	136.38	13.32	17.57
75	94.06	116.56	10.36	13.99
80	76.84	97.68	7.83	10.91

**Percent of Eligible Active Members Retiring within the Next Year**

Ages	Without Rule of 80 Eligibility				With Rule of 80 Eligibility			
	General*		Police*	Fire*	General			
	Men	Women			Men	Women	Police	Fire
50			3%	3%	20%	20%	25%	25%
51			3	3	15	20	25	25
52			3	3	15	20	20	25
53			3	3	15	20	20	25
54			3	3	15	20	20	25
55	2%	3%	10	20	15	20	20	25
56	2	3	10	20	15	15	20	25
57	2	3	10	10	15	15	10	10
58	2	3	10	10	15	15	25	15
59	2	3	10	15	15	15	20	10
60	10	10	10	20	20	25	30	20
61	10	10	10	15	20	20	25	15
62	25	20	30	30	35	20	30	45
63	25	20	15	25	35	20	25	35
64	20	15	20	30	35	20	50	70
65	25	20	100	100	35	30	100	100
66	25	20			35	35		
67	20	20			35	30		
68	20	20			25	25		
69	20	15			35	35		
70	100	100			100	100		

\* First 5 years of retirement pattern only apply to early retirement.

**GENERAL - MEN**  
**Separations from Active Employment Before Age & Service Retirement**  
**& Individual Pay Increase Assumptions**

Sample Ages	Years of Service	Percent of Active Members Separating within the Next Year		Pay Increase Assumptions for an Individual Employee		
		Death	Other	Merit & Seniority	Base (Economy)	Increase Next Year
ALL	0		19.00%			
	1		16.00			
	2		12.00			
	3		10.00			
	4		8.00			
25	5 & Over	0.04%	7.70	3.3%	4.0%	7.3%
30		0.04	6.80	2.5	4.0	6.5
35		0.08	5.40	2.0	4.0	6.0
40		0.11	4.20	1.5	4.0	5.5
45		0.15	3.50	1.0	4.0	5.0
50		0.21	3.00	0.6	4.0	4.6
55		0.36	2.30	0.4	4.0	4.4
60		0.67	1.20	0.3	4.0	4.3
65		1.27	0.00	0.0	4.0	4.0

**GENERAL - WOMEN**  
**Separations from Active Employment Before Age & Service Retirement**  
**& Individual Pay Increase Assumptions**

Sample Ages	Years of Service	Percent of Active Members Separating within the Next Year		Pay Increase Assumptions for an Individual Employee		
		Death	Other	Merit & Seniority	Base (Economy)	Increase Next Year
ALL	0		21.00%			
	1		19.00			
	2		15.00			
	3		12.00			
	4		11.00			
25	5 & Over	0.02%	11.00	3.3%	4.0%	7.3%
30		0.03	9.60	2.5	4.0	6.5
35		0.05	7.90	2.0	4.0	6.0
40		0.07	6.60	1.5	4.0	5.5
45		0.11	5.00	1.0	4.0	5.0
50		0.17	4.30	0.6	4.0	4.6
55		0.27	3.00	0.4	4.0	4.4
60		0.51	1.40	0.3	4.0	4.3
65		0.97	0.00	0.0	4.0	4.0

**POLICE**  
**Separations from Active Employment Before Age & Service Retirement**  
**& Individual Pay Increase Assumptions**

Sample Ages	Years of Service	Percent of Active Members Separating within the Next Year		Pay Increase Assumptions for an Individual Employee		
		Death	Other	Merit & Seniority	Base (Economy)	Increase Next Year
ALL	0		18.50%			
	1		16.50			
	2		14.50			
	3		12.50			
	4		11.00			
25	5 & Over	0.04%	10.70	3.3%	4.0%	7.3%
30		0.04	9.00	2.5	4.0	6.5
35		0.08	6.90	2.0	4.0	6.0
40		0.11	5.50	1.5	4.0	5.5
45		0.15	4.40	1.0	4.0	5.0
50		0.21	3.50	0.6	4.0	4.6
55		0.36	1.00	0.4	4.0	4.4

**FIRE**  
**Separations from Active Employment Before Age & Service Retirement**  
**& Individual Pay Increase Assumptions**

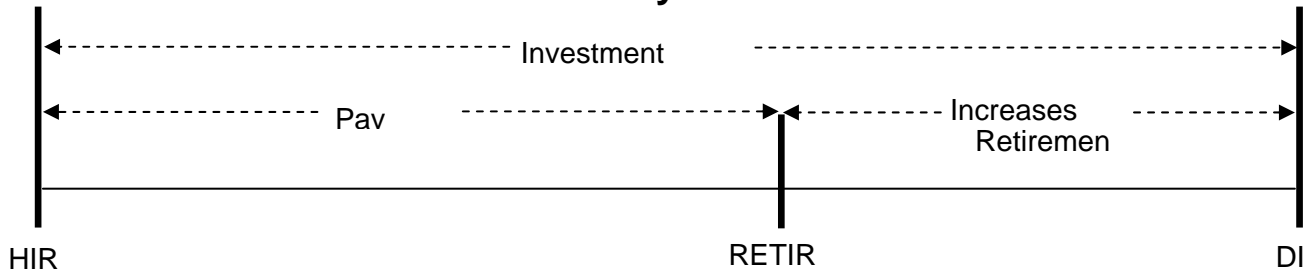
Sample Ages	Years of Service	Percent of Active Members Separating within the Next Year		Pay Increase Assumptions for an Individual Employee		
		Death	Other	Merit & Seniority	Base (Economy)	Increase Next Year
ALL	0		8.00%			
	1		7.00			
	2		6.00			
	3		6.00			
	4		5.00			
25	5 & Over	0.04%	4.40	5.1%	4.0%	9.1%
30		0.04	3.80	3.2	4.0	7.2
35		0.08	3.10	1.9	4.0	5.9
40		0.11	2.50	1.2	4.0	5.2
45		0.15	1.80	0.9	4.0	4.9
50		0.21	1.00	0.6	4.0	4.6
55		0.36	0.50	0.4	4.0	4.4

## Miscellaneous and Technical Assumptions

Expenses	Assumed investment return is net of administrative and investment expenses.
Marriage Assumption	90% of male and 90% 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 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.
Decrement Operation	The mortality decrement does not operate during the first 5 years of service. The withdrawal decrement does not operate during retirement eligibility.



# Relationship of Economic Assumptions In Computing Contributions to a Retirement System



## Investment

An increase in this assumption reduces computed contributions. The assumption operates over all parts of an employee's lifetime.

## Pay

An increase in this assumption increases computed contributions. However, a 1% increase in this assumption, coupled with a 1% increase in Investment Return reduces computed contributions. This is because the Pay Base assumption operates only over an employee's working lifetime, while the Investment Return assumption operates over the employee's entire lifetime, and therefore has a greater effect.

## Increases After

An increase in this element increases computed contributions.

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If Investment Return, Pay Base, and Increases After Retirement are each increased by equal amounts, computed contributions remain the same (except in plans using Final Average Pay as a factor in computing benefits; the multi- year average used for Final Average Pay causes computed contributions to decrease slightly).

If Investment Return and Pay Base are increased by equal amounts, with no change in Increases After Retirement, computed contributions decrease - sometimes significantly. The decreases represent the projected devaluation of an employee's benefits following retirement.

# Investment Return and Inflation: Past and Future

## Inflation Distortions

Inflation's impact on investment return is not uniform from year to year. A common expectation for Real Investment Return (the portion of Total Return remaining after Inflation) is in the area of 3% to 4% annually.

Over the last 30 years, Real Return exceeded that range on average. However, for parts of the period it was actually negative. It is very difficult to maintain a long-term portfolio allocation during periods of negative real return.

### Annual Investment Return (including Income) expressed as REAL RETURN (Remainder after Inflation)

No. Years Ended	Inflation (CPI)	Cash Equiv. (T Bills)	Bonds (Long Term)		Stocks (S & P 500)	Real Return for Sample Fund		
			US Treasury	Corporate (Sol. Bro)		A	B	C
December								
1/2001	1.6	2.2	2.1	9.0	(13.3)	(0.5)	(4.2)	(6.9)
1/2002	2.4	(0.7)	15.0	13.6	(23.9)	1.4	(6.3)	(12.1)
1/2003	1.9	(0.9)	(0.4)	3.3	26.3	8.6	13.6	17.5
1/2004	3.3	(2.0)	5.0	5.2	7.4	5.0	5.5	5.8
1/2005	3.4	(0.4)	4.3	2.4	1.5	2.4	2.0	1.7
5/1975	6.9	(1.0)	(0.7)	(0.8)	(3.5)	(1.2)	(1.7)	(2.1)
5/1980	9.2	(1.3)	(6.9)	(6.2)	4.3	(2.6)	(0.4)	1.3
5/1985	4.8	5.2	11.5	12.3	9.4	10.7	10.2	9.8
5/1990	4.1	2.6	6.4	6.1	8.6	6.7	7.2	7.6
5/1995	2.8	1.5	10.0	9.1	13.4	10.0	10.8	11.3
5/2000	2.5	2.6	4.9	3.2	15.4	7.7	10.0	11.7
5/2005	2.5	(0.4)	5.1	6.6	(2.0)	3.4	2.0	0.7
<b>30/2005</b>	<b>4.3</b>	<b>1.7</b>	<b>5.0</b>	<b>5.0</b>	<b>8.1</b>	<b>5.8</b>	<b>6.5</b>	<b>7.0</b>

### Sample Funds (Only three of many reasonable samples)

	A	B	C
Cash: T-Bills	10 %	10 %	10 %
Bonds: US	30	20	10
Bonds: Corp	30	20	15
Stock	30	50	65

For many pension plans, Benefit Increases after Retirement have fallen short of keeping up with inflation. The retired life group has been hurt more than the active life group. The investment return necessary for the indexing of benefits after retirement probably cannot be realized during a period of high inflation.

## Changes in Economic Assumptions within an Economic Environment of Inflation

There is powerful motivation to increase the assumed Investment Return used in actuarial calculations, with or without a related increase in Employee Pay Base, because such an assumption change decreases computed contributions. A contribution rate decrease (i) offers relief for employer budget problems and/or (ii) offers a "no cost" way to provide benefit increases.

The wisdom of Investment Return assumed for the future can be determined only by future events. Will the investment record of the next 30 years be the same as the last 30 Years? Will it be like the 5-year period ended in 1980? Better? Worse? What will happen when the "Baby Boomers" start retiring?



## LAGERS Retainer Actuarial Fees 10 Year Comparative Statement

Valuation Date As of	Number of Valuation Groups	Annual Actuarial Fees (nearest \$1)	Consumer Price Index (1967 is 100)	AVERAGE FEE PER GROUP	
				Unadjusted Dollars	1967* Dollars
2-28-1997	686	\$159,701	478.2	233	49
2-28-1998	711	164,711	484.9	232	48
2-28-1999	731	166,991	492.9	228	46
2-29-2000	747	169,995	508.7	228	45
2-28-2001	777	174,985	526.7	225	43
2-28-2002	791	180,971	532.7	229	43
2-28-2003	803	183,775	548.5	229	42
2-29-2004	828	188,812	557.9	228	41
2-28-2005	846	192,294	574.5	227	40
2-28-2006	865	198,378	595.2	229	38

\* A goal for LAGERS during the initial design activity in 1966 and 1967 was that the actuarial retainer fee be approximately \$100 annually per valuation group - - - an amount substantially less than the amount the municipality would pay if it arranged independently for an actuarial valuation of comparable quality.

August 30, 2006

Mr. William R. Schwartz  
Executive Secretary  
Missouri Local Government  
Employees Retirement System  
701 West Main Street  
Jefferson City, Missouri 65101

Dear Bill:

Please find enclosed 8 copies of the *Compiled Report of the February 28, 2006 valuations* for the participating employers of the Missouri Local Government Employees Retirement System. We have also sent copies to each of the Board Members.

Sincerely,

Mita D. Drazilov

MDD:JAK:rmg:bd  
Enclosures

cc: Ms. Anita Brand, (Williams-Keepers, LLC)  
LAGERS Board Members

# MISSOURI LOCAL GOVERNMENT EMPLOYEES RETIREMENT SYSTEM

**Compiled 38th Annual Actuarial Valuations  
As of February 28, 2006**

**GRS**

Gabriel Roeder Smith & Company