



MISSOURI LOCAL GOVERNMENT EMPLOYEES RETIREMENT SYSTEM Compiled 42nd Annual Actuarial Valuations As of February 28, 2010

Report of Compiled Actuarial Valuations of LAGERS

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One Towne Square Suite 800 Southfield, MI 48076-3723

August 31, 2010

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

Submitted in this report are the compiled results of the *42nd annual actuarial valuations* for the Missouri Local Government Employees Retirement System, as amended through February 28, 2010.

The date of the valuations was February 28, 2010.

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 *971 groups (597 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 2010 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.

Your attention is directed particularly to the Comments on pages 2 through 4, and to the Short Condition Test on page B-6.

Based upon the 2010 valuations, it is our opinion that *LAGERS continues in sound condition in accordance* with actuarial principles of level cost financing.

The actuaries submitting this statement are Members of the American Academy of Actuaries (MAAA) as indicated, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Mita D. Drazilov, ASA, MAAA

MDD:JAK:rmg

white A. Eurons

Judith A. Kermans, EA, MAAA

Individual valuations of participating employers. There were 971 new employer contribution rates computed as of February 28, 2010. (Thirty-three groups had no active employees and a dollar contribution was calculated for them. These thirty-three groups are excluded from the totals on this page.) Of the 971 new rates, 201 were decreases from the previous rates, 707 were increases from the previous rates and 63 were unchanged. Further detail is shown in Section G. A ten year comparative schedule follows:

Valuation Date	Decreases	Unchanged	Increases	Total
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
2-28-2006*	640	27	198	865
2-28-2007	536	118	239	893
2-29-2008	577	110	233	920
2-28-2009	71	54	820	945
2-28-2010	201	63	707	971

* Revised financial assumptions and/or funding method.

Decreases in employer contribution rates are seldom a problem. Increases can be a problem. Increases in computed employer contribution rates exceeded decreases due primarily to worse than expected investment return on an actuarial value of assets basis in prior years. Many groups are at the 1% "employer cap" and are expected to be for the next few years.

Experience during valuation year. Investment return was above the assumed rate of return on a market value of assets basis as of February 28, 2010. This helped to offset the phase-in effects of the unrecognized market loss from the previous year. This allowed unadjusted employer contribution rates to remain relatively level. However, there is still significant upward pressure on capped employer contribution rates. The market value of assets now exceeds the actuarial value of assets by 3%. (Beginning in 2003, the actuarial value of assets is not allowed to deviate from the market value of assets by more than 20%.)

Section D of this report presents a summary of the analysis of the economic and non-economic risk areas. For the year ended February 28, 2010, the System experienced an actuarial gain of approximately \$86 million. This consisted of a small recognized gain on assumed investment return, COLA increases for retirees and beneficiaries less than the assumed rate and lower pay increases than assumed.

Retired life experience. The Benefit Reserve Fund (BRF) funded ratio increased from 87.2% to 89.1% as of February 28, 2010, due to lower than expected cost of living increases in addition to scheduled reserve transfers for retirements that occurred during the valuation year. Please refer to page B-11 for detail.

The BRF funded ratio continues to be less than 100% due primarily to the recent market decline. While it is preferred to have a BRF funded ratio greater than 100%, it is not something that needs to be remedied immediately. However, it does require continued attention. Some of the ways in which a 100% funded ratio may be achieved over the next few years include:

- Investment income above the assumed rate of return,
- COLAs to existing retirees and beneficiaries lower than that assumed for valuation purposes, and
- Reduced interest credits to the Employer Accumulation Fund (EAF).

Funded Ratio. The funded ratio for the System as of the valuation date is 81.0% based on the actuarial value of assets. If the market value of assets were used, the funded ratio would be approximately 84%.

RESERVE STRENGTH OF EACH GROUP BEING SEPARATELY EXPERIENCE-RATED

"Reserve strength" means the portion of accrued liabilities which are covered by accrued assets. The larger the portion covered, the greater the reserve strength.

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).

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 FINANCIAL PRINCIPLES

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 third 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.

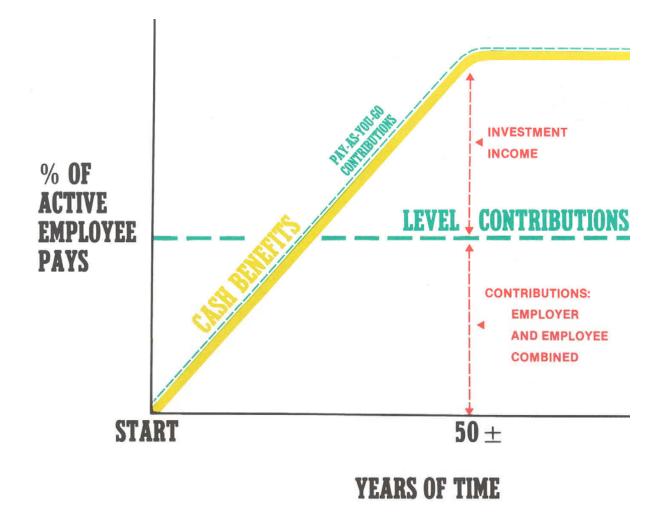
In making an actuarial valuation the system must assume what the above experience will be, for the next year and for decades in the future. Only the subsequent actual experience of the System can indicate the degree of accuracy of the assumptions.

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. 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. (For example, if a change in active group size appears to not be temporary.)



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* 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:

and/or New Employer Contribution Rate.

Plan financial position

SECTION B VALUATION RESULTS

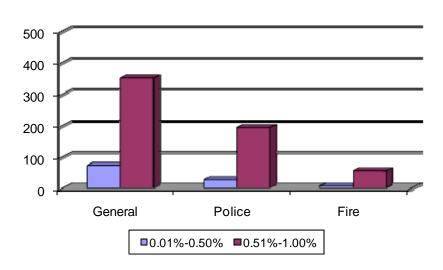
CHANGE IN EMPLOYER CONTRIBUTIONS* BY VALUATION GROUPS FEBRUARY 28, 2010

		Number of Valuation Groups with Indicated							
		Change in Employer Contribution Rate							
	Number of]	Decreases			Increa	ases		
	Active	Over	0.51%	0.01%	Unchanged	0.01%	0.51%		
Group	Members	1.00%	to 1.00%	to 0.50%	0.00%	to 0.50%	to 1.00%	Totals	
General:	1 - 9	12	24	39	29	42	96	242	
	10 - 49		8	30	12	27	146	223	
	50 & up		3	7	2	4	109	125	
	Totals	12	35	76	43	73	351	590	
Police:	1 - 9	7	17	20	10	17	63	134	
	10 - 49		3	4	6	9	108	130	
	50 & up				<u>1</u>	1	22	24	
	Totals	7	20	24	17	27	193	288	
Fire:	1 - 9	1	4	10	2	6	18	41	
	10 - 49	1	1	10	1	1	31	45	
	50 & up						7	7	
	Totals	2	5	20	3	7	56	93	
Totals		21	60	120	63	107	600	971	

* 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.

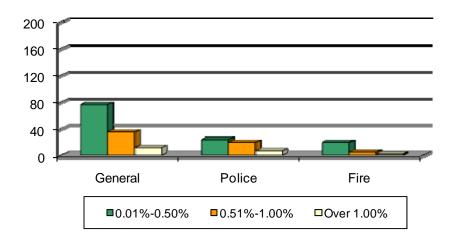
In broad terms, the smaller the group, the greater the chance of a relatively large change in employer rate from one year to the next.

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. (LAGERS provides a maximum annual increase of one percent of payroll for any one participating employer.)

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 liabilities which helps understanding. The smaller the ratio of unfunded liabilities to active member payroll, the stronger the System.

	(a)	(b)	(b-a)		(c)	[(b-a)/c]
	Actuarial	Entry Age	Unfunded	(a/b)	Annual	UAL as a
Valuation	Value of	Actuarial Accrued	Accrued	Funded	Covered	% of Covered
Date	Assets	Liability	Liability (UAL)	Ratio	Payroll	Payroll
2-28-2001 #	\$ 2,395,912,598	\$ 2,302,816,630	\$ (93,095,968)	104.0%	\$ 808,959,105	-
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
2-28-2007	3,557,389,198	3,700,813,660	143,424,462	96.1	1,146,094,426	12.5
2-29-2008	3,957,068,611	4,058,828,886	101,760,275	97.5	1,222,745,363	8.3
2-28-2009	3,330,662,923	4,161,775,258	831,112,335	80.0	1,285,952,041	64.6
2-28-2010	3,592,225,739	4,432,331,886	840,106,147	81.0	1,331,226,335	63.1

Revised actuarial assumptions.

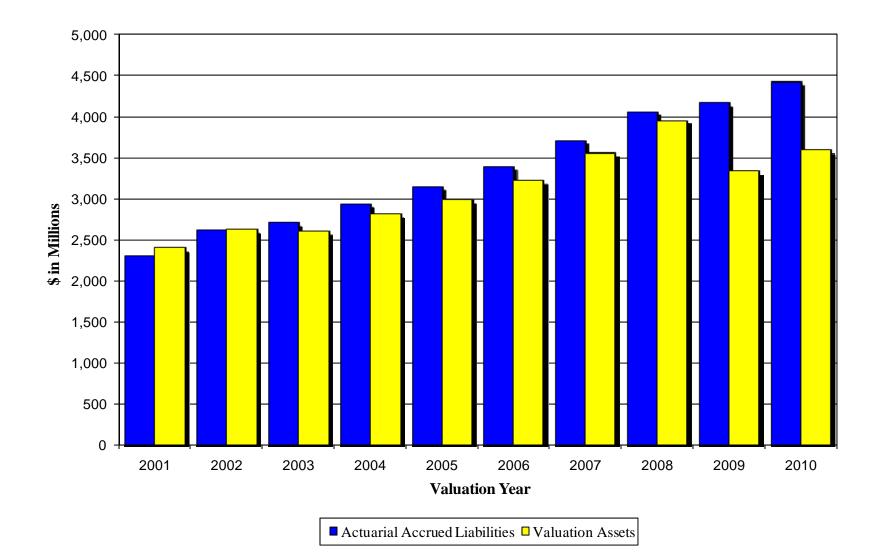
Each employer participating in the System is financially responsible for its own obligation. Accordingly, the aggregate numbers presented on this and the following pages are indicative only of the overall condition of the System and are not indicative of any one employer.

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

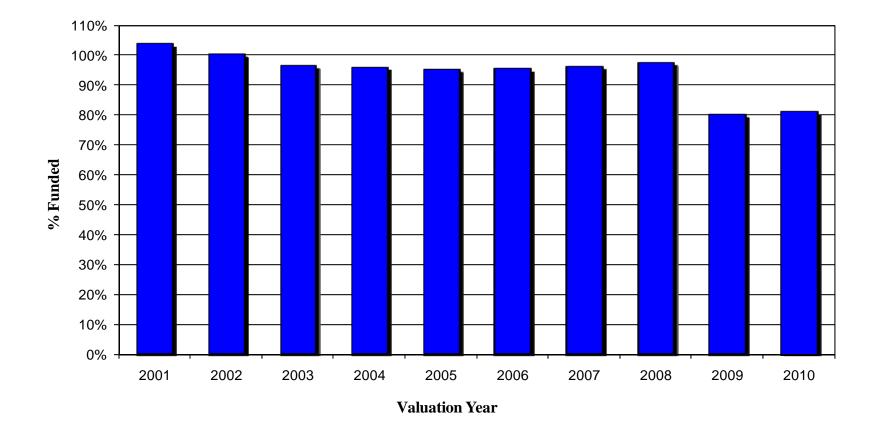
- Employers adopting new benefit programs. For example, before reflecting the benefit changes adopted by political subdivisions during the year, the 2-28-2009 and 2-28-2010 Funded Ratios would have been 80.2% (instead of 80.0%) and 81.8% (instead of 81.0%), respectively.
- New employers joining LAGERS (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.

PORTION OF ACTUARIAL ACCRUED LIABILITIES COVERED BY VALUATION ASSETS



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.

	Entr	y Age Accrued I					
	(1)	(2)	(3)		I	Portion	of
	Active	Retirants	Active Members		Acci	ued Lia	ıbility
Valuation	Member	and	(Employer Financed	Actuarial Value	Cove	red by A	Assets
Date	Contributions	Beneficiaries *	Portion)	of Assets	(1)	(2)	(3)
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
2-28-2007	80,282,208	1,327,231,970	2,293,299,482	3,557,389,198	100	100	94
2-29-2008	83,469,819	1,508,613,771	2,466,745,296	3,957,068,611	100	100	96
2-28-2009	86,881,969	1,473,463,652	2,601,429,637	3,330,662,923	100	100	68
2-28-2010	92,054,693	1,562,886,567	2,777,390,626	3,592,225,739	100	100	70

Comparative Schedule

Revised actuarial assumptions.

* Includes reserve for future benefit increases.

The Employers Accumulation Fund assets totaled \$2,082,626,984 as of February 28, 2010 based on the actuarial value of assets. The individual participating Employers Accumulation Fund accrued liabilities (entry age normal cost method) were computed to be \$2,751,711,380 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.

	Actuarial	Aggregate	Ratio of
Valuation	Value	Accrued	Assets to
Date	of Assets	Liabilities	Liabilities*
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
2-28-2007	2,134,329,993	2,277,754,455	93.7
2-29-2008	2,347,624,427	2,449,384,702	95.8
2-28-2009	1,941,813,012	2,583,636,842	75.2
2-28-2010	2,082,626,984	2,751,711,380	75.7

Aggregate Accrued Liabilities and Actuarial Value of Assets Comparative Statement

Revised actuarial assumptions.

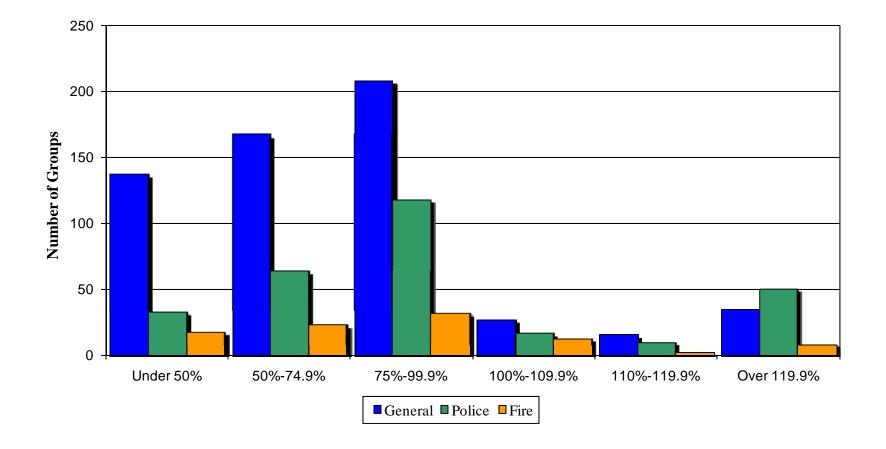
* The larger the ratio of assets to liabilities, the greater the reserve strength of the Employers Accumulation Fund.

EMPLOYERS ACCUMULATION FUND PORTION OF LIABILITIES COVERED BY ASSETS BY VALUATION GROUPS FEBRUARY 28, 2010

		Number of Valuation Groups with Assets							
	Number of		as a Percent of Actuarial Accrued Liabilities						
	Active	Under	50.0%	75.0%	100.0%	110.0%	Over		
Group	Members	50.0% #	- 74.9%	- 99.9%	- 109.9%	- 119.9%	119.9%	Totals*	
General:	1 - 9	91	72	47	4	5	23	242	
	10 - 49	37	70	84	13	10	9	223	
	50 & up	9	25	77	10	<u>1</u>	3	125	
	Totals	137	167	208	27	16	35	590	
Police:	1 - 9	26	29	35	6	2	36	134	
	10 - 49	6	26	68	9	7	14	130	
	50 & up		8	15	1			24	
	Totals	32	63	118	16	9	50	288	
Fire:	1 - 9	12	11	9	2		7	41	
	10 - 49	4	8	20	10	2	1	45	
	50 & up	1	3	3				7	
	Totals	17	22	32	12	2	8	93	
Totals*		186	252	358	55	27	93	971	

* Not included in this tabulation are 33 groups which presently have no active members.

Valuation groups included in these totals are generally from employers recently joining the System.



The Members Deposit Fund assets for active members totaled \$92,054,693 as of February 28, 2010. The Members Deposit Fund actuarial accrued liabilities are set equal to assets.

Valuation Date	Actuarial Value of Assets	Aggregate Accrued Liabilities	Ratio of Assets to Liabilities	
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	
2-28-2007	80,282,208	80,282,208	100.0	
2-29-2008	83,469,819	83,469,819	100.0	
2-28-2009	86,881,969	86,881,969	100.0	
2-28-2010	92,054,693	92,054,693	100.0	

Aggregate Actuarial Accrued Liabilities and Actuarial Value of Assets Comparative Statement

BENEFIT RESERVE FUND

The Benefit Reserve Fund assets as of February 28, 2010 totaled \$1,391,864,816 based on the actuarial value of assets. The present value of future benefits was computed to be \$1,562,886,567 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 assumed annual investment return.

Beginning in 1986, each year LAGERS actual investment return rate is credited to the Benefit Reserve Fund. Investment return over the assumed rate 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, 2009 and consisted of an overall increase of 4% or less.

Annual		Donofit	Investment	Present Value of	Reserve for		Actuarial	Ratio of Actuarial Value
		Benefit						
Valuation	Pensions	Increase %	Return %	Future	Future	Accrued	Value of	of Assets to
Date	Being Paid	Last Oct. 1	Last June 30	Benefits	Experience	Liabilities	Assets	PVFB
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
2-28-2007	107,261,960	4.0	15.3	1,203,934,295	123,297,675	1,327,231,970	1,327,231,970	110.2
2-29-2008	118,839,948	4.0	9.4	1,335,544,346	173,069,425	1,508,613,771	1,508,613,771	113.0
2-28-2009	131,340,234	4.0	7.5	1,473,463,652	0	1,473,463,652	1,284,175,147	87.2
2-28-2010	139,391,994	4.0	(9.1)	1,562,886,567	0	1,562,886,567	1,391,864,816	89.1

Actuarial Accrued Liabilities and Accrued Assets Comparative Statement

Revised actuarial assumptions.

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

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.

	Employer Contribution
Benefit Formula	Rate to the CRF
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.

Valuation	Employer L-1 Contributions:	Actuarial Value of	Accrued	Assets Expressed as Perce of Member Payroll	
Date	Year Ended	Assets	Liabilities	Total	Change
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
2-28-2007 #	0.3	15,545,027	15,545,027	1.4	-0.7
2-29-2008	0.3	17,360,594	17,360,594	1.4	0.0
2-28-2009	0.3	17,792,795	17,792,795	1.4	0.0
2-28-2010	0.3	25,679,246	25,679,246	1.9	0.5

Actuarial Value of Assets at Valuation Dates Comparative Statement

Reflects special \$10 million transfer from the Casualty Reserve Fund to the Income-Expense Fund.

SECTION C ASSET DATA USED IN THE VALUATIONS

REPORTED ACCRUED ASSETS AVAILABLE FOR BENEFITS FEBRUARY 28, 2010

Statutory Funds	Reported Assets	Actuarial Value of Assets
Employers Accumulation Fund	\$1,875,626,887	\$2,082,626,984
Members Deposit Fund	92,054,693	92,054,693
Benefit Reserve Fund	1,259,378,227	1,391,864,816
Casualty Reserve Fund	23,234,931	25,679,246
Total	\$3,250,294,738	\$3,592,225,739

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, 2010 balance in the Income-Expense Fund was used for valuation purposes.

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.

Presented below is a table showing investment credits to the various Funds of the system for the last 5 years.

	Investment Credits as % of Fund Balance				
	Casualty	Members	Benefit	Employer	
	Reserve	Deposit	Reserve	Accumulation	Inflation
Year Ended	Fund	Fund	Fund	Fund	Loss %
June 30	Α	В	С	D	(CPI)
2006	7.5%	4.0%	15.3%	15.9%	4.3%
2007	7.5	4.0	9.4	9.6	2.7
2008	7.5	4.0	7.5	7.7	5.0
2009	7.5	4.0	(9.1)	(9.7)	(1.4)
2010	7.5	4.0	5.4	5.4	1.1
5 Year	r Compound Av	verage	5.4%	5.4%	2.3%

Rates of Investment Return Allocated to LAGERS Fund Accounts

- 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 comes from 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 comes from 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).

Ye	ar Ending February 28:	2006	2007	2008	2009
A.	Actuarial Value Beginning of Year	\$2,984,562,342	\$3,224,299,770	\$3,557,248,790	\$3,957,198,044
B.	Market Value End of Year	3,465,462,225	3,856,385,431	3,989,486,215	2,775,432,090
C.	Market Value Beginning of Year	3,114,372,296	3,465,462,225	3,856,385,431	3,989,486,215
D.	Non-Investment/Administrative Net Cash Flow	7,997,305	8,738,768	6,103,368	(7,132,095)
E.	Investment Income				
	E1. Market Total: B-C-D	343,092,624	382,184,438	126,997,416	(1,206,922,030)
	E2. Assumed Rate of Return	7.50%	7.50%	7.50%	7.50%
	E3. Amount for Immediate Recognition	224,142,075	242,150,187	267,022,536	296,522,400
	E4. Amount for Phased-In Recognition: E1-E3	118,950,549	140,034,251	(140,025,120)	(1,503,444,430)
F.	Phased-In Recognition of Investment Income				
	F1. Current Year: 0.20 x E4	23,790,110	28,006,850	(28,005,024)	(300,688,886)
	F2. First Prior Year	12,707,493	23,790,110	28,006,850	(28,005,024)
	F3. Second Prior Year	90,323,919	12,707,493	23,790,110	28,006,850
	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
	F6. Total Recognized Phase-Ins	7,598,048	82,060,065	126,823,350	(264,189,455)
G.	Actuarial Value End of Year				
	G1. Preliminary Actuarial Value End of Year: A+D+E3+F6	\$3,224,299,770	\$3,557,248,790	\$3,957,198,044	\$3,982,398,894
	G2. Upper Corridor Limit: 120% x B	4,158,554,670	4,627,662,517	4,787,383,458	3,330,518,508
	G3. Lower Corridor Limit: 80% x B	2,772,369,780	3,085,108,345	3,191,588,972	2,220,345,672
	G4. Actuarial Value End of Year	\$3,224,299,770	\$3,557,248,790	\$3,957,198,044	\$3,330,518,508
H.	Difference Between Market & Actuarial Value	241,162,455	299,136,641	32,288,171	(555,086,418)
I.	Ratio of Actuarial Value to Market Value	93.0%	92.2%	99.2%	120.0%
J.	Actuarial Value Adjustment Factor (ratio of actuarial				
	value to EAF+MDF+CRF+BRF cost value)	1.2127	1.1609	1.1810	0.9290
К.	Recognized Rate of Return	7.75%	10.04%	11.06%	(15.67)%
L.	Market Rate of Return	11.00%	11.01%	3.29%	(30.28)%

DEVELOPMENT OF FUNDING VALUE OF RETIREMENT SYSTEM ASSETS

The asset valuation method recognizes assumed investment income (line E3) 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.

DEVELOPMENT OF FUNDING VALUE OF RETIREMENT SYSTEM ASSETS

Ye	ar Ending February 28:	2010	2011	2012	2013	2014
A.	Actuarial Value Beginning of Year	\$3,330,518,508				
B.	Market Value End of Year	3,704,012,118				
C.	Market Value Beginning of Year	2,775,432,090				
D.	Non-Investment/Administrative Net Cash Flow	(11,908,404)				
E.	Investment Income					
	E1. Market Total: B-C-D	940,488,432				
	E2. Assumed Rate of Return	7.50%				
	E3. Amount for Immediate Recognition	249,342,323				
	E4. Amount for Phased-In Recognition: E1-E3	691,146,109				
F.	Phased-In Recognition of Investment Income					
	F1. Current Year: 0.20 x E4	138,229,222				
	F2. First Prior Year	(137,718,790)	\$ 138,229,222			
	F3. Second Prior Year	(28,005,024)	(137,718,790)	\$ 138,229,222		
	F4. Third Prior Year	28,006,850	(28,005,024)	(137,718,790)	\$ 138,229,222	
	F5. Fourth Prior Year	23,790,110	28,006,851	(28,005,024)	(137,718,788)	\$ 138,229,221
	F6. Total Recognized Phase-Ins	24,302,368	512,259	(27,494,592)	510,434	138,229,221
G.	Actuarial Value End of Year					
	G1. Preliminary Actuarial Value End of Year: A+D+E3+F6	\$3,592,254,795				
	G2. Upper Corridor Limit: 120% x B	4,444,814,542				
	G3. Lower Corridor Limit: 80% x B	2,963,209,694				
	G4. Actuarial Value End of Year	\$3,592,254,795				
H.	Difference Between Market & Actuarial Value	111,757,323	111,245,063	138,739,655	138,229,221	
I.	Ratio of Actuarial Value to Market Value	97.0%				
J.	Actuarial Value Adjustment Factor (ratio of actuarial					
	value to EAF+MDF+CRF+BRF cost value)	1.1052				
K.	Recognized Rate of Return	8.23%				
L.	Market Rate of Return	33.96%				

The asset valuation method recognizes assumed investment income (line E3) 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.

Reported Assets	(Including I	Income/Expense Fund)
------------------------	--------------	----------------------

Market Value - February 28, 2010		
Cash & equivalents	\$ 62,832,284	
Receivables & accruals	546,614	
Stocks	2,018,307,431	
Bonds & government securities	1,109,771,381	
Timber	192,528,526	
Miscellaneous	320,025,882	
Total Current Assets	\$ 3,704,012,118	

Revenues and Expenses

Market Value	Year Ended February 28, 2009	Year Ended February 28, 2010
Balance - Beginning of year	\$ 3,989,486,215	\$ 2,775,432,090
Revenues:		
Employees' contributions	8,170,481	9,162,742
Employer contributions	132,951,352	134,690,075
Investment income	(1,170,287,594)	947,000,557
Total	(1,029,165,761)	1,090,853,374
Expenditures:		
Benefit payments	145,365,982	154,106,651
Refund of member contributions	2,887,946	1,654,570
Administrative and investment expenses	36,634,436	6,512,125
Total	184,888,364	162,273,346
Balance - End of Year	<u>\$ 2,775,432,090</u>	<u>\$ 3,704,012,118</u>

SECTION D GAIN/LOSS ANALYSIS

Purpose of Gain/Loss Analysis. Regular actuarial valuations provide information about the composite change in unfunded actuarial accrued liabilities -- whether or not the liabilities are increasing or decreasing, and by how much.

However, valuations do not show the portion of the change attributable to each risk area within the Retirement System: the rate of investment income on plan assets; the rates of withdrawal of active members who leave covered employment; the rates of mortality; the rates of disability; the rates of salary increases; the assumed ages at actual retirement. In an actuarial valuation, assumptions are made as to what these rates will be for the next year and for decades in the future.

The objective of a gain and loss analysis is to determine the portion of the change in unfunded actuarial accrued liabilities attributable to each risk area.

The fact that actual experience differs from assumed experience is to be expected. The future cannot be predicted with precision. Changes in the valuation assumption for a risk area should be made when the differences between assumed and actual experience have been observed to be sizable and persistent. One year's gain and loss analysis may or may not be indicative of *long-term trends, which are the basis of financial assumptions*.

DEVELOPMENT OF TOTAL GAIN/(LOSS) MARCH 1, 2009 TO FEBRUARY 28, 2010

Unfunded Accrued Liabilities (UAL), March 1	\$831,112,335
Employer Normal Cost	123,414,236
Employer Contributions	134,690,075
Interest	61,910,581
Expected UAL Before Any Changes	881,747,077
Change from Benefit Changes Plus New Employers	44,438,874
Change from Revised Actuarial Assumptions	0
Expected UAL After All Changes	926,185,951
Actual UAL, February 28	840,106,147
Gain/(Loss) for Year From Experience	\$ 86,079,804

This page measures the actual gain or loss for the year after adjusting for the effect of benefit and assumption changes plus any new employers joining LAGERS during the year.

ANALYSIS OF FINANCIAL EXPERIENCE FOR THE YEAR ENDED FEBRUARY 28, 2010

Gains and Losses in Pension Accrued Liabilities Resulting from Differences Between Assumed Experience and Actual Experience

Type of Activity	Gain or (Loss) For Year Ended 2/28/2010
Age & Service Retirements. If members retire at older ages or with lower final average pay than assumed, there is a gain. If younger ages or higher average pays, a loss.	\$ 412,703
Death-in-Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	842,769
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(8,352,488)
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	60,812,921
Investment Income. If there is greater investment return on assets than assumed, there is a gain. If less return, a loss.	24,302,368
Retiree, Beneficiary and Deferred Activity. Includes members living longer than expected, COLA increases different than expected, etc.	31,469,186
Benefit Reserve Fund. Release of reserve for future experience.	0
Other. Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, valuation methods, etc.	(23,407,655)
Gain (or Loss) During Year From Experience	\$ 86,079,804

INVESTMENT GAIN (LOSS) FOR THE YEAR ENDED FEBRUARY 28, 2010

Assets, Beginning of Year	\$3,330,518,508
Net Cash Flow	(11,908,404)
Assumed Investment Return	249,342,323
Expected Assets End of Year	3,567,952,427
Actual Assets End of Year	3,592,254,795
Gain/(Loss) for Year	\$ 24,302,368

ACTIVE MEMBER POPULATION RECONCILIATION MARCH 1, 2009 TO FEBRUARY 28, 2010

	Actual	Expected
Active Members Beginning of Year	32,291	
Plus New Hires	3,520	
Minus Retirements*	661	997.3
Minus Deaths	19	53.4
Minus Disabilities	37	#
Minus Other Terminations	2,119	2,078.8
Active Members End of Year	32,975	

* Actual retirements include 53 retirees at or above the age where retirements are assumed to occur 100% of the time. Expected retirements include 301 retirees at or above the age where retirements are assumed to occur 100% of the time.

Disability retirements are funded by assets in the pooled Casualty Reserve Fund and by past normal cost contributions for the disabled member.

SECTION E 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, 2010 (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.

MISSOURI LOCAL GOVERNMENT EMPLOYEES RETIREMENT SYSTEM BRIEF SUMMARY OF LAGERS BENEFITS AND CONDITIONS EVALUATED AND/OR CONSIDERED THROUGH FEBRUARY 28, 2010 (SECTION REFERENCES ARE TO RSMO) (CONTINUED)

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 above.

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 regardless of credited service 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.

MISSOURI LOCAL GOVERNMENT EMPLOYEES RETIREMENT SYSTEM BRIEF SUMMARY OF LAGERS BENEFITS AND CONDITIONS EVALUATED AND/OR CONSIDERED THROUGH FEBRUARY 28, 2010 (SECTION REFERENCES ARE TO RSMO) (CONCLUDED)

(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 2 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 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 E-1 through E-3 for a summary of LAGERS provisions.

When the 2010 actuarial valuations were made, the Benefit Programs evaluated were as follows:

			Benefit Programs																							
						N	on-Co	ntribut	ory										Cont	ributor	у					
FAS	Groups	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	Totals
5 yr.	General	48	31	2	5	20	45	8	5	2		4	4	49	26	1		12	15	4	3				1	285
	Police	22	15	1	2	11	31	4	4			3		24	13			7	8	2					1	148
	Fire	3	3	1	1	<u>5</u>	8	4	_	_		3	1	6	3	_		2	2	_	_				_	42
	Totals	73	49	4	8	36	84	16	9	2		10	5	79	42	1		21	25	6	3				2	475
3 yr.	General	19	19		5	42	56	21	11	9	2	18	7	24	15	1	2	21	30	3	5	2		3	1	316
	Police	8	8		5	20	25	15	9	5	0	10	5	8	3	1	2	14	12	2	2			2	1	157
	Fire	6	2		3	6	5	<u>9</u>	4	3	3	2	2	1	1	-	2	3	2	_	_	-		2	-	56
	Totals	33	29		13	68	86	45	24	17	5	30	14	33	19	2	6	38	44	5	7	2		7	2	529

The above LT columns include both the LT(62) and LT(65) benefit programs. The table includes 33 groups with no active members.

SECTION F PARTICIPANT DATA

PARTICIPATING EMPLOYERS EVALUATED FEBRUARY 28, 2010

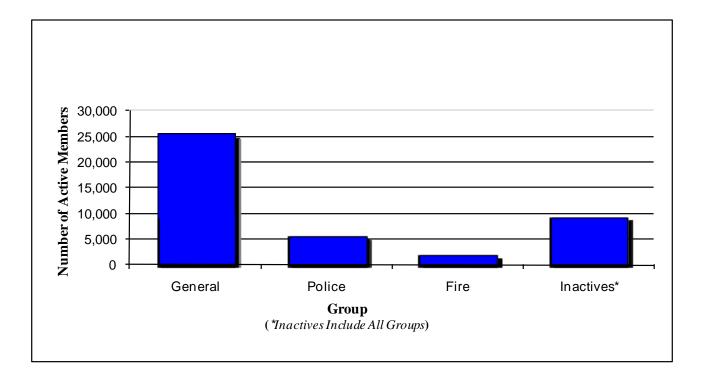
	Number of
Type of Group	Participating Employers
General Only	282
Police Only	1
Fire Only	13
General and Police	221
General and Fire	14
General and Police and Fire	66
Total	597

ACTIVE AND INACTIVE MEMBERS IN VALUATIONS FEBRUARY 28, 2010

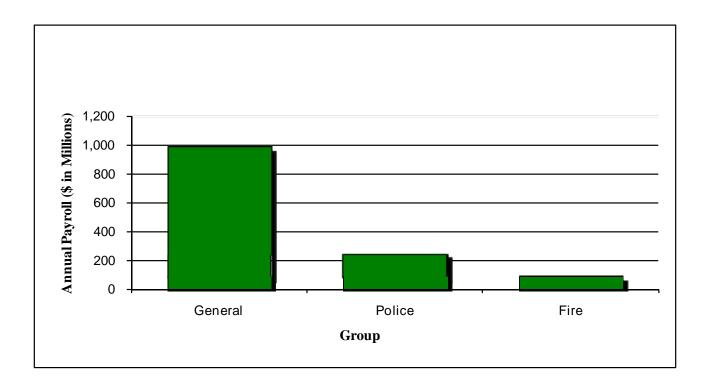
	Num	nber of	
Classification	Members	Valuation Groups*	Annual Payroll
Active Members			
General	25,563	590	\$ 992,755,518
Police	5,566	288	246,328,914
Fire	1,846	93	92,141,903
Total Actives	32,975	971	\$1,331,226,335
Inactive Members #	9,374		
Total Members	42,349		

* 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.

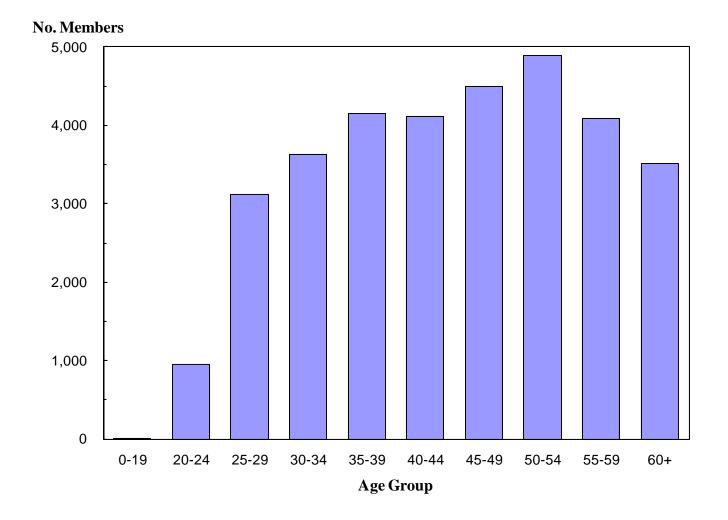
Inactive members are individuals who terminated employment after 5 or more years of LAGERS service, with rights to a deferred benefit commencing at age 60 (age 55 for police and fire members). In addition, members who terminated with one employer and have worked or are now working for another LAGERS-covered employer are included in this number count ("linked members"). There are 6,186 linked members included in the above total.



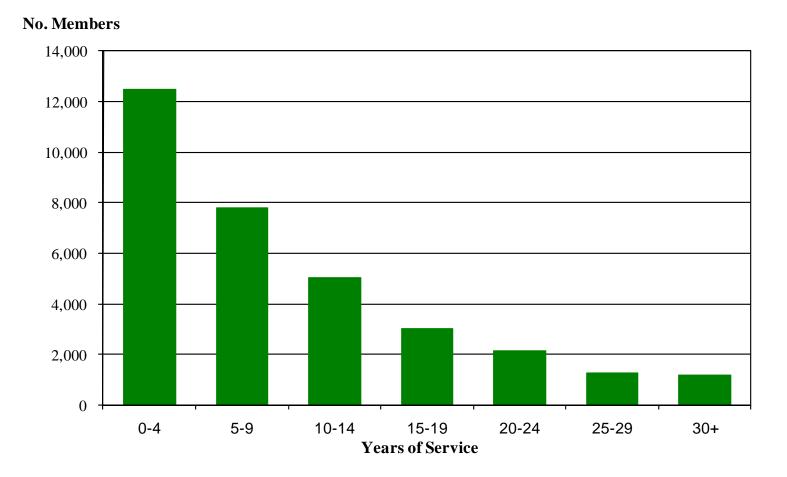
ANNUAL PAYROLL BY GROUP



DISTRIBUTION OF ACTIVE MEMBERS BY AGE FEBRUARY 28, 2010



DISTRIBUTION OF ACTIVE MEMBERS BY SERVICE FEBRUARY 28, 2010



GENERAL MEMBERS - MEN ACTIVE AS OF FEBRUARY 28, 2010 BY ATTAINED AGE AND YEARS OF SERVICE

		Years	of Serv	vice to V	aluatior	n Date			Totals
Attained									Valuation
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
Under 20	3							3	\$ 66,130
20-24	414	7						421	11,504,976
25-29	867	231	3					1,101	35,355,173
30-34	740	478	151	2				1,371	51,675,517
35-39	612	461	312	99	0			1,484	61,544,071
40-44	595	444	316	217	113	3		1,688	73,850,105
45-49	579	455	355	272	254	119	21	2,055	93,352,750
50-54	498	425	365	251	270	220	185	2,214	99,782,623
55-59	417	383	288	221	202	199	278	1,988	91,356,179
60	61	59	54	29	45	23	45	316	14,931,194
61	63	71	39	44	27	17	38	299	13,424,140
62	56	59	38	33	30	25	34	275	13,152,902
63	42	44	36	24	16	10	21	193	9,485,982
64	24	35	16	14	7	9	9	114	4,551,833
65	17	19	22	11	5	10	10	94	4,213,844
66	12	22	17	7	8	4	13	83	3,649,320
67	18	23	13	4	7	6	2	73	2,826,791
68	14	18	10	6	3	0	4	55	2,177,818
69	7	8	4	2	1	1	4	27	1,192,515
70 & Over	24	32	32	20	10	8	9	135	4,942,898
Totals	5,063	3,274	2,071	1,256	998	654	673	13,989	\$593,036,761

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

Age:45.8 yearsService:10.5 yearsAnnual Pay:\$42,393

GENERAL MEMBERS - WOMEN ACTIVE AS OF FEBRUARY 28, 2010 BY ATTAINED AGE AND YEARS OF SERVICE

		Years	of Servi	ice to Va	aluation	Date			Totals
Attained								Valuation	
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
Under 20	2							2	\$ 25,130
20-24	276	2						278	6,503,232
25-29	770	167	1					938	27,716,416
30-34	652	319	81	1				1,053	34,059,959
35-39	603	360	216	74	0			1,253	42,563,885
40-44	522	359	252	134	50	4		1,321	47,382,950
45-49	545	431	299	171	131	56	5	1,638	58,719,472
50-54	517	467	413	225	162	105	70	1,959	72,209,859
55-59	362	367	299	249	144	84	97	1,602	58,054,628
60	62	75	46	42	33	12	21	291	10,328,769
61	52	54	53	37	31	14	17	258	9,118,405
62	46	42	42	31	20	11	15	207	6,878,148
63	41	51	39	32	28	15	18	224	8,054,575
64	16	37	28	24	13	6	10	134	4,621,902
65	18	18	27	17	8	0	6	94	3,126,109
66	8	19	21	16	5	7	6	82	2,772,891
67	10	17	6	7	10	3	5	58	2,001,553
68	6	6	8	6	2	2	3	33	982,561
69	4	4	9	3	9	3	2	34	1,016,987
70 & Over	13	25	22	25	11	7	12	115	3,581,326
Totals	4,525	2,820	1,862	1,094	657	329	287	11,574	\$399,718,757

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

Age:	46.2 years
Service:	9.3 years
Annual Pay:	\$34,536

POLICE MEMBERS ACTIVE AS OF FEBRUARY 28, 2010 BY ATTAINED AGE AND YEARS OF SERVICE

		Year	s of Ser	vice to `	Valuatio	n Date			Totals
Attained									Valuation
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
Under 20	0							0	\$ -
20-24	183	0						183	5,824,598
25-29	708	104	0					812	29,634,771
30-34	531	372	65	0				968	38,088,846
35-39	359	330	319	48	0			1,056	46,667,364
40-44	204	196	205	176	25	1		807	38,071,898
45-49	122	122	79	91	133	31	0	578	28,865,256
50-54	65	75	67	81	104	95	37	524	27,671,978
55-59	53	49	49	52	47	46	67	363	18,504,192
60	6	9	5	7	5	8	7	47	2,491,839
61	11	9	3	5	9	11	10	58	2,865,930
62	7	7	4	11	5	3	8	45	2,032,776
63	6	15	3	9	4	0	2	39	1,719,071
64	4	6	1	4	8	2	1	26	1,209,469
65	2	4	4	1	2	0	2	15	748,119
66	3	2	2	1	1	0	1	10	438,455
67	1	3	4	3	1	0	1	13	613,257
68	0	0	3	1	0	0	0	4	269,845
69	1	0	0	0	0	0	1	2	78,156
70 & Over	2	4	4	3	1	0	2	16	533,094
Totals	2,268	1,307	817	493	345	197	139	5,566	\$246,328,914

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

Age:40.0 yearsService:9.2 yearsAnnual Pay:\$44,256

FIRE MEMBERS ACTIVE AS OF FEBRUARY 28, 2010 BY ATTAINED AGE AND YEARS OF SERVICE

		Years	of Serv	vice to V	aluation	n Date			Totals
Attained									Valuation
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
20-24	65	0						65	\$ 2,190,175
25-29	235	34	0					269	10,286,085
30-34	125	88	22	0				235	10,145,082
35-39	108	130	102	17	0			357	17,054,841
40-44	54	74	89	64	20	1		302	15,801,103
45-49	19	36	40	58	64	14	0	231	13,267,515
50-54	13	20	14	19	48	61	24	199	11,856,157
55-59	7	11	10	16	23	26	45	138	8,708,559
60	0	0	0	2	2	2	5	11	701,827
61	1	2	0	2	3	1	6	15	834,294
62	2	1	0	2	0	1	2	8	420,257
63	1	1	0	0	0	1	5	8	480,609
64	1	0	0	0	0	0	0	1	33,741
65	0	0	0	0	0	0	0	0	0
66	0	0	1	0	0	1	0	2	105,744
67	0	0	0	1	0	0	1	2	97,044
68	0	0	0	0	0	0	0	0	0
69	0	0	0	0	0	0	0	0	0
70 & Over	0	1	1	0	0	1	0	3	158,870
Totals	631	398	279	181	160	109	88	1,846	\$92,141,903

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

Age:	40.3 years
Service:	11.1 years
Annual Pay:	\$49,914

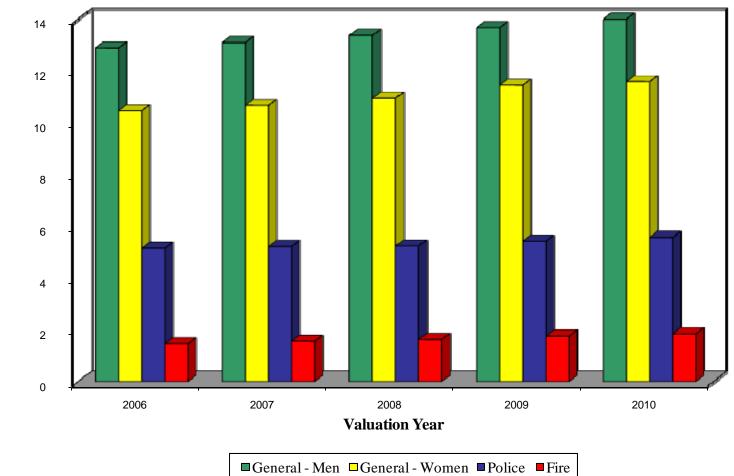
PARTICIPATING EMPLOYERS AND MEMBERS IN VALUATIONS 10 YEAR COMPARATIVE STATEMENT

	Numbe	r of		Active Men	nbers		
Valuation Date	Participating Employers	Valuation Groups	Number	Annual Payroll	Average Pay	% Increase	Inflation Increase % (C.P.I.)
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
2-28-2007	546	893	30,521	1,146,094,426	37,551	3.9	2.4
2-29-2008	563	920	31,187	1,222,745,363	39,207	4.4	4.0
2-28-2009	578	945	32,291	1,285,952,041	39,824	1.6	0.2
2-28-2010	597	971	32,975	1,331,226,335	40,371	1.4	2.1
			10 Ye	ear Compound Ave	erage	3.2%	2.5%

ACTIVE MEMBERS IN VALUATIONS - GROUP AVERAGES (AVERAGES NOT USED IN VALUATIONS; COMPUTED AND SHOWN BECAUSE OF GENERAL INFORMATION VALUE)

				Group	Averages ·		Inflation	
	Valuation	No. of	(In Y	(ears)	Annual H	Payroll	Increase %	
Group	at 2-28	Members	Age	Service	Average	Change	(C.P.I)	
General - Men	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	
	2007	13,082	45.4	10.4	39,742	+4.3	+2.4	
	2008	13,360	45.5	10.4	41,277	+3.9	+4.0	
	2009	13,665	45.6	10.4	42,076	+1.9	+0.2	
	2010	13,989	45.8	10.5	42,393	+0.8	+2.1	
General - Women	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	
	2007	10,657	45.7	8.9	31,788	+3.4	+2.4	
	2008	10,952	45.8	9.0	33,254	+4.6	+4.0	
	2009	11,435	45.9	9.0	33,871	+1.9	+0.2	
	2010	11,574	46.2	9.3	34,536	+2.0	+2.1	
Police	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	
	2007	5,217	39.7	9.0	40,789	+4.2	+2.4	
	2008	5,243	39.7	9.0	42,973	+5.4	+4.0	
	2009	5,427	39.8	9.0	43,584	+1.4	+0.2	
	2010	5,566	40.0	9.2	44,256	+1.5	+2.1	
Fire	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	
	2007	1,565	40.8	12.0	47,687	+1.8	+2.4	
	2008	1,632	40.7	11.8	50,106	+5.1	+4.0	
	2009	1,764	40.2	11.2	49,397	-1.4	+0.2	
	2010	1,846	40.3	11.1	49,914	+1.0	+2.1	

ACTIVE MEMBERS BY GROUP 2006-2010



Members (Thousands)

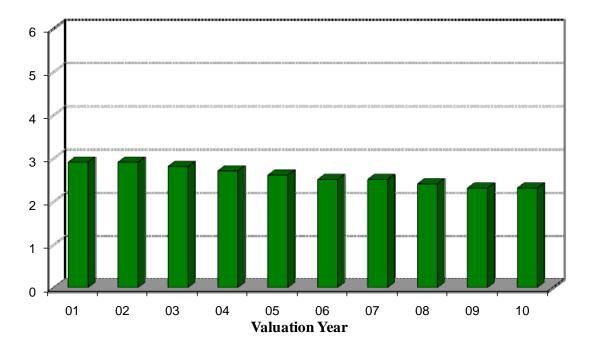
RETIRANTS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS 10 YEAR COMPARATIVE STATEMENT

	Ad	ded to Rolls	Remo	oved from Rolls	Rolls	End of Year			Retired Live to Active	s in Relation Members
Year Ended	No.	Annual Allowances*	No.	Annual Allowances	No.	Annual Allowances	% Incr. in Annual Allowances	Average Annual Allowances	Active Member Per Benefit Recipient	s Allowances as Percents of Active Payroll
2-28-2001	816	\$ 8,094,550	330	\$ 2,026,823	9,180	\$ 57,989,017	11.7%	\$6,317	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
2-28-2007	1,060	13,753,477	441	3,750,959	12,406	107,261,960	10.3	8,646	2.5	9.4
2-29-2008	1,259	15,530,468	496	3,952,480	13,169	118,839,948	10.8	9,024	2.4	9.7
2-28-2009	1,227	16,525,323	490	4,025,037	13,906	131,340,234	10.5	9,445	2.3	10.2
2-28-2010	1,197	12,647,092	481	4,595,332	14,622	139,391,994	6.1	9,533	2.3	10.5

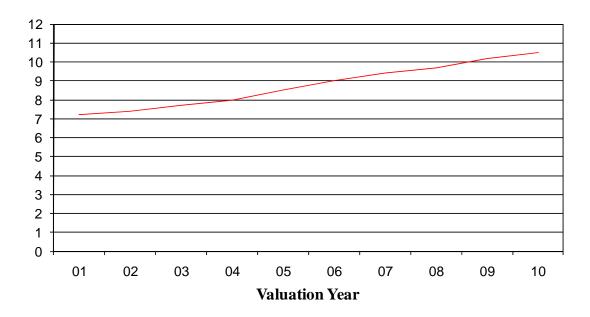
* Includes post-retirement adjustments.

RETIRANTS AND BENEFICIARIES COMPARATIVE DATA

Active Members Per Benefit Recipient



Allowances as % of Active Pay



RETIRANTS AND BENEFICIARIES ON ROLLS FEBRUARY 28, 2010 BY DISBURSING FUND AND TYPE OF BENEFIT BEING PAID

Type of Benefit	Number	Annual Allowances
Service Early & Deferred		
Life Option	6,524	\$ 61,101,042
Option A	2,254	24,232,192
Option B	1,469	21,412,275
Option C	1,411	10,956,161
Beneficiary Receiving	1,088	6,231,181
Totals	12,746	123,932,851
Duty Disability		
Life Option	290	4,261,784
Option A	114	1,399,653
Option B	51	758,455
Option C	36	484,887
Totals	491	6,904,779
Non-Duty Disability		
Life Option	266	2,020,753
Option A	130	1,129,689
Option B	54	516,003
Option C	73	491,626
Totals	523	4,158,071
Beneficiary Receiving	218	1,087,833
Total Disability	1,232	12,150,683
Death-In-Service		
Spouse Receiving	596	3,169,814
Children Receiving	48	138,646
Totals	644	3,308,460
Totals	14,622	\$139,391,994

SECTION G COMPUTED EMPLOYER CONTRIBUTIONS: SUMMARY OF COMPUTED INDIVIDUAL RATES

COMPUTED EMPLOYER CONTRIBUTIONS: NON-CONTRIBUTORY PLANS BY VALUATION GROUPS AS OF FEBRUARY 28, 2010

		Number	of Valuation	n Groups	
	Under	2.00-	5.00-	Over	
Group	2.00%	4.99%	7.99%	8.00%	Totals
Benefit Program L-1					
General	9	16	26	13	64
Police	10	8	8	3	29
Fire	<u>1</u>	<u>0</u>	<u>6</u>	<u>2</u>	<u>9</u>
Total	20	24	40	18	102
Benefit Program L-3					
General	9	5	13	23	50
Police	6	1	3	11	21
Fire	<u>0</u>	<u>1</u>	<u>0</u>	<u>4</u>	<u>5</u>
Total	15	7	16	38	76
Benefit Program LT-4(62)					
General	0	0	0	0	0
Police	0	0	0	0	0
Fire	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	0	0	0	0	0
Benefit Program LT-4(65)					
General	0	0	1	1	2
Police	0	0	0	1	1
Fire	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>
Total	0	0	1	3	<u>1</u> 4
Benefit Program LT-5(62)					
General	0	1	2	1	4
Police	0	2	0	1	3
Fire	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>
Total	0	3	3	$\frac{0}{2}$	8
Benefit Program LT-5(65)					
General	0	4	1	1	6
Police	2	1	1	0	4
Fire	<u>1</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>3</u>
Total	<u>1</u> 3	6	$\frac{0}{2}$	$\frac{1}{2}$	13
Benefit Program L-6					
General	2	1	1	58	62
Police	3	0	1	27	31
Fire	<u>0</u>	<u>0</u>	<u>0</u>	<u>8</u>	<u>8</u>
Total	<u>0</u> 5	1	2	93	101
Benefit Program L-7					
General	3	12	34	50	99
Police	8	10	18	18	54
Fire	<u>1</u>	<u>3</u>	<u>6</u>	<u>3</u>	<u>13</u>
Total	12	25	58	71	166

COMPUTED EMPLOYER CONTRIBUTIONS: NON-CONTRIBUTORY PLANS BY VALUATION GROUPS AS OF FEBRUARY 28, 2010 (CONTINUED)

		Number	of Valuation	n Groups	
	Under	2.00-	5.00-	Over	
Group	2.00%	4.99%	7.99%	8.00%	Totals
Benefit Program LT-8(62)					
General	0	2	0	2	4
Police	0	0	1	1	2
Fire	<u>0</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>
Total	0	2	2	5	9
Benefit Program LT-8(65)					
General	0	0	9	15	24
Police	1	1	5	9	16
Fire	<u>1</u>	<u>1</u>	1	<u>7</u>	<u>10</u>
Total	2	2	15	31	50
Benefit Program L-9					
General	1	2	3	10	16
Police	1	4	3	5	13
Fire	<u>2</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>4</u>
Total	4	6	6	17	33
Benefit Program LT-10(65)					
General	1	0	0	10	11
Police	1	0	1	3	5
Fire	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>3</u>
Total	2	0	1	16	19
Benefit Program L-11					
General	0	0	0	1	1
Police	0	0	0	0	0
Fire	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>3</u>
Total	0	0	0	4	4
Benefit Program L-12					
General	2	1	1	17	21
Police	1	3	2	7	13
Fire	<u>1</u>		<u>0</u>	<u>4</u>	<u>5</u>
Total	4	<u>0</u> 4	<u>0</u> 3	28	39
Benefit Program LT-14(65)					
General	0	0	2	9	11
Police	1	0	1	3	5
Fire	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>3</u>
Total	1	0	3	15	19
Totals*	68	80	152	343	643

* There are seventeen Non-Contributory groups presently without active members. They are not included in the totals.

COMPUTED EMPLOYER CONTRIBUTIONS: CONTRIBUTORY PLANS BY VALUATION GROUPS AS OF FEBRUARY 28, 2010

		Number	of Valuation	n Groups	
	Under	2.00-	5.00-	Over	
Group	2.00%	4.99%	7.99%	8.00%	Totals
Benefit Program L-1					
General	6	25	24	16	71
Police	3	12	11	2	28
Fire	<u>0</u>	<u>1</u>	<u>5</u>	<u>1</u>	7
Total	9	38	40	19	106
Benefit Program L-3					
General	5	8	16	12	41
Police	2	5	6	1	14
Fire	<u>0</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>4</u>
Total	<u>0</u> 7	13	25	14	59
Benefit Program LT-4(62)					
General	0	0	0	0	0
Police	0	0	0	0	0
Fire	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	0	0	0	0	0
Benefit Program LT-4(65)					
General	0	0	1	1	2
Police	0	0	0	0	0
Fire	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	0	0	1	1	2
Benefit Program LT-5(62)					
General	0	0	0	0	0
Police	0	0	0	0	0
Fire	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	0	0	0	0	0
Benefit Program LT-5(65)					
General	0	1	1	0	2
Police	0	0	1	1	2
Fire	<u>0</u>	<u>0</u>	$\frac{0}{2}$	<u>2</u> 3	<u>2</u> 6
Total	0	1	2	3	6
Benefit Program L-6					
General	0	2	4	26	32
Police	3	2	3	12	20
Fire	<u>1</u>	<u>0</u>	<u>0</u>	<u>4</u>	<u>5</u>
Total	4	4	7	42	57
Benefit Program L-7					
General	3	5	17	20	45
Police	1	9	5	4	19
Fire	<u>0</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>
Total	4	14	23	26	67

COMPUTED EMPLOYER CONTRIBUTIONS: CONTRIBUTORY PLANS BY VALUATION GROUPS AS OF FEBRUARY 28, 2010 (CONTINUED)

		Number	of Valuation	n Groups	
	Under	2.00-	5.00-	Over	
Group	2.00%	4.99%	7.99%	8.00%	Totals
Benefit Program LT-8(62)					
General	0	0	1	0	1
Police	0	0	0	0	0
Fire	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	0	0	1	0	1
Benefit Program LT-8(65)					
General	0	2	2	2	6
Police	0	3	0	0	3
Fire	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	0	5	2	2	9
Benefit Program L-9					
General	1	3	3	1	8
Police	0	1	0	0	1
Fire	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	1	4	3	1	9
Benefit Program LT-10(65)					
General	0	0	0	2	2
Police	0	0	0	0	0
Fire	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	0	0	0	2	$\frac{0}{2}$
Benefit Program L-11					
General	0	0	0	0	0
Police	0	0	0	0	0
Fire	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	0	0	0	0	0
Benefit Program L-12					
General	0	0	0	3	3
Police	0	0	0	2	2
Fire	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>
Total	0	0	0	6	6
Benefit Program LT-14(65)					
General	0	0	0	2	2
Police	0	1	0	1	2
Fire	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	0	1	0	3	4
Totals*	25	80	104	119	328

* There are sixteen contributory groups presently without active members. They are not included in the totals.

SECTION H 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 H-4 and H-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 for males 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 H-3. Adopted 2001.

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

The probabilities of withdrawal from service and death-in-service are shown for sample ages on pages H-4 and H-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. Actuarial gains or losses for each employer are amortized over various closed periods ranging from 15 to 30 years. Benefit changes adopted by employers are amortized over a closed 30-year period. Once a 15-year period is reached, the amortization period becomes open. Adoption of the Non-Contributory Refund provision is amortized over a closed 15-year period. 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. The funding value of assets is not permitted to deviate from the market value of assets 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.

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

SINGLE LIFE RETIREMENT VALUES (1971 GROUP ANNUITY MORTALITY TABLE FOR MALES PROJECTED TO 2000, SETBACK 1 YEAR FOR MEN AND 7 YEARS FOR WOMEN, & I = 7.5%)

	Present Va	lue of \$1.00		
	Monthly l	Increasing	Futu	re Life
Sample	for	Life	Expectar	ncy (years)
Attained Ages	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

	Wit	thout Rule o	of 80 Eligibi	ility	W	ith Rule of	80 Eligibili	ty
	Gei	ne ral*			Ge	neral		
Ages	Men	Women	Police*	Fire*	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

			ent of ers Separating	Pay Increase Assumptions for an Individual Employee			
Sample	Years of	within the	Next Year	Merit &	Base	Increase	
Ages	Service	Death	Other	Seniority	(Economy)	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

	Percent of Active Members Separating		Pay Increase Assumptions for an Individual Employee			
Sample	Years of	within the	within the Next Year		Base	Increase
Ages	Service	Death	Other	Seniority	(Economy)	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

The pay increase assumptions are age based only, and not service based.

POLICE SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE AGE & SERVICE RETIREMENT & INDIVIDUAL PAY INCREASE ASSUMPTIONS

		Percent of Active Members Separating within the Next Year		Pay Increase Assumptions for an Individual Employee		
Sample	Years of			Merit &	Base	Increase
Ages	Service	Death	Other	Seniority	(Economy)	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

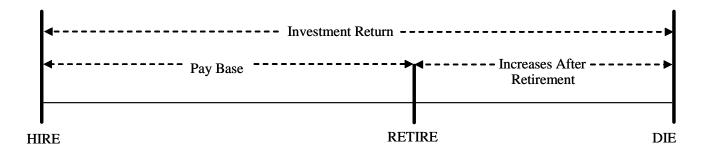
FIRE SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE AGE & SERVICE RETIREMENT & INDIVIDUAL PAY INCREASE ASSUMPTIONS

		Percent of Active Members Separating within the Next Year		Pay Increase Assumptions for an Individual Employee			
Sample	Years of			Merit &	Base	Increase	
Ages	Service	Death	Other	Seniority	(Economy)	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	

The pay increase assumptions are age based only, and not service based.

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 benefits. Male spouses 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 employer's applicable fiscal year based upon the computed percent of payroll shown in each employer's individual 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.
Deferred Members' Retirement Age	It was assumed that deferred members would retire at the later of age 60 (55 for police or fire) or their attained age.

RELATIONSHIP OF ECONOMIC ASSUMPTIONS IN COMPUTING CONTRIBUTIONS TO A RETIREMENT SYSTEM



Investment Return

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

Pay Base

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.

Increases After Retirement

An increase in this element increases computed contributions.

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.

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 Price 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.

No. Years		Cash	Bonds (L	ong Term)				
Ended	Inflation	Equiv.	US	Corporate	Stocks	Real Re	eturn for Sa	mple Fun
December	(CPI)	(T Bills)	Treasury	(Sol. Bro.)	(S & P 500)	Α	В	С
1/2005	3.4	(0.4)	4.3	2.4	1.5	2.4	2.0	1.7
1/2006	2.5	2.2	(1.3)	0.7	13.0	3.9	6.6	8.7
1/2007	4.1	0.6	5.6	(1.4)	1.3	1.7	1.5	1.2
1/2008	0.1	1.5	25.8	8.7	(37.1)	(0.6)	(11.5)	(20.1)
1/2009	2.7	(2.5)	(17.1)	0.3	23.2	1.7	8.0	13.1
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
5/2009	2.6	0.2	2.4	2.0	(2.1)	1.8	1.1	0.2
30/2009	3.5	1.9	6.0	5.9	7.4	6.5	6.9	7.0

	Α	В	C
Cash: T-Bills Bonds: US	10 % 30	10 % 20	10 % 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 "Baby Boomers" begin to swell the retired population?



LAGERS RETAINER ACTUARIAL FEES 10 YEAR COMPARATIVE STATEMENT

				Average Fee	e per Group
Valuation Date As of	Number of Valuation Groups	Annual Actuarial Fees (nearest \$1)	Consumer Price Index (1967 is 100)	Unadjus te d Dollars	1967* Dollars
2-28-2001	777	\$174,985	526.700	\$225	\$43
2-28-2002	791	180,971	532.700	229	43
2-28-2003	803	183,775	548.500	229	42
2-29-2004	828	188,812	557.900	228	41
2-28-2005	846	192,294	574.500	227	40
2-28-2006	865	198,378	595.200	229	38
2-28-2007	893	205,631	609.594	230	38
2-29-2008	920	210,579	634.139	229	36
2-28-2009	945	219,088	635.637	232	36
2-28-2010	971	248,740	649.259	256	39

* 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.



One Towne Square Suite 800 Southfield, MI 48076-3723 248.799.9000 phone 248.799.9020 fax www.gabrielroeder.com

August 31, 2010

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 15 copies of the Compiled Report of the February 28, 2010 annual actuarial valuations for the participating employers of the Missouri Local Government Employees Retirement System.

Sincerely,

Mite Draylov Mita D. Drazilov

MDD:JAK:rmg Enclosures

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