



MISSOURI LOCAL GOVERNMENT EMPLOYEES RETIREMENT SYSTEM

Compiled 41st Annual Actuarial Valuations As of February 28, 2009

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September 3, 2009

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

Submitted in this report are the compiled results of the *41st annual actuarial valuations* for the Missouri Local Government Employees Retirement System, as amended through February 28, 2009.

The date of the valuations was February 28, 2009.

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 945 groups (578 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 2009 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 2009 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

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COMMENTS ON VALUATION RESULTS

Individual valuations of participating employers. There were 945 new employer contribution rates computed as of February 28, 2009. (Thirty-four groups had no active employees and a dollar contribution was calculated for them. These thirty-four groups are excluded from the totals on this page.) Of the 945 new rates, 71 were decreases from the previous rates, 820 were increases from the previous rates and 54 were unchanged. Further detail is shown in Section G. A ten year comparative schedule follows:

Valuation Date	Decreases	Unchanged	Increases	Total
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
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

^{*} 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. 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 below the assumed rate of return on a market value of assets basis as of February 28, 2009. This had significant upward pressure on employer contribution rates. The actuarial value of assets now exceeds the market value of assets by 20%. (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, 2009, the System experienced an actuarial loss of approximately \$721 million. This consisted of primarily a loss on assumed investment return partially offset by a reduction in the Reserve for Future Experience in the Benefit Reserve Fund.

COMMENTS ON VALUATION RESULTS - CONTINUED

Retired life experience. The Benefit Reserve Fund (BRF) funded ratio decreased from 113.0% to 87.2% as of February 28, 2009, due to lower than expected recognized investment return offset by scheduled reserve transfers for retirements that occurred during the valuation year. Please refer to page B-11 for detail.

This is the first year in recent memory that the BRF funded ratio is 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 80.0% based on the actuarial value of assets. If the market value of assets were used, the funded ratio would be approximately 67%.

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. 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).

.....

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.



FINANCIAL PRINCIPLES AND OPERATIONAL TECHNIQUES OF LAGERS

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.

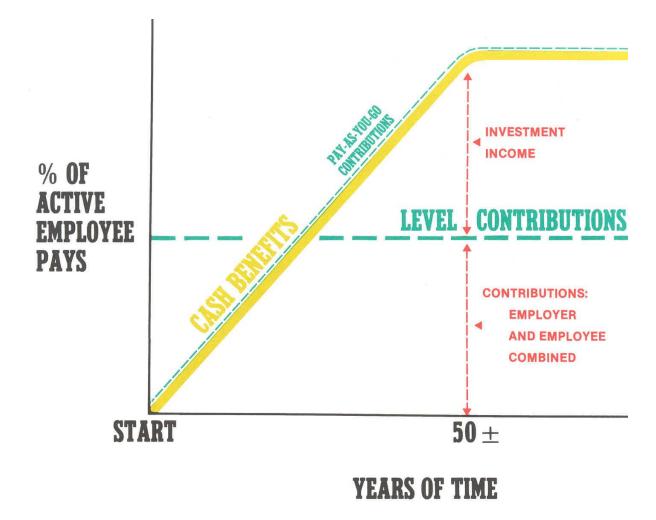
In making an actuarial valuation the system must assume what the above experience will be, for the next year and for decades in the future. Only the subsequent actual experience of the System can indicate the degree of accuracy of the assumptions.

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 PROCESS

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.



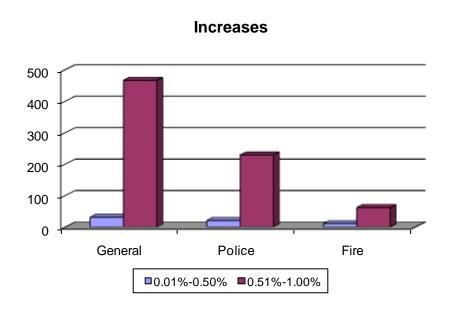
CHANGE IN EMPLOYER CONTRIBUTIONS* BY VALUATION GROUPS FEBRUARY 28, 2009

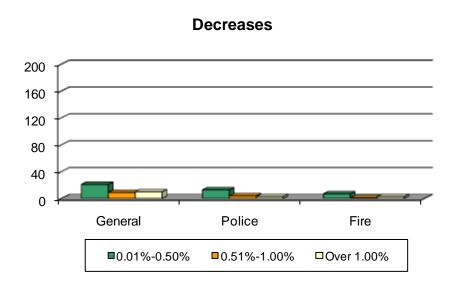
		Number of Valuation Groups with Indicated							
		Change in Employer Contribution Rate							
	Number of]	Decreases			Increa	ases		
	Active	Over	0.51%	0.01%	Unchanged	0.01%	0.51%		
Group	Members	1.00%	to 1.00%	to 0.50%	0.00%	to 0.50%	to 1.00%	Totals	
General:	1 - 9	9	6	9	28	23	144	219	
	10 - 49	1	2	12	7	8	202	232	
	50 & up		<u>1</u>				<u>120</u>	<u>121</u>	
	Totals	10	9	21	35	31	466	572	
Police:	1 - 9	3	3	11	11	18	90	136	
	10 - 49		1	2	3	3	117	126	
	50 & up						<u>22</u>	<u>22</u>	
	Totals	3	4	13	14	21	229	284	
Fire:	1 - 9	2		4	4	7	22	39	
	10 - 49	1	1	3	1	4	34	44	
	50 & up						<u>6</u>	<u>6</u>	
	Totals	3	1_	7	5	11	62	89	
Totals		16	14	41	54	63	757	945	

^{*} 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





^{*} 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 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.

	(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
2-29-2000	\$ 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
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

[#] Revised actuarial assumptions.

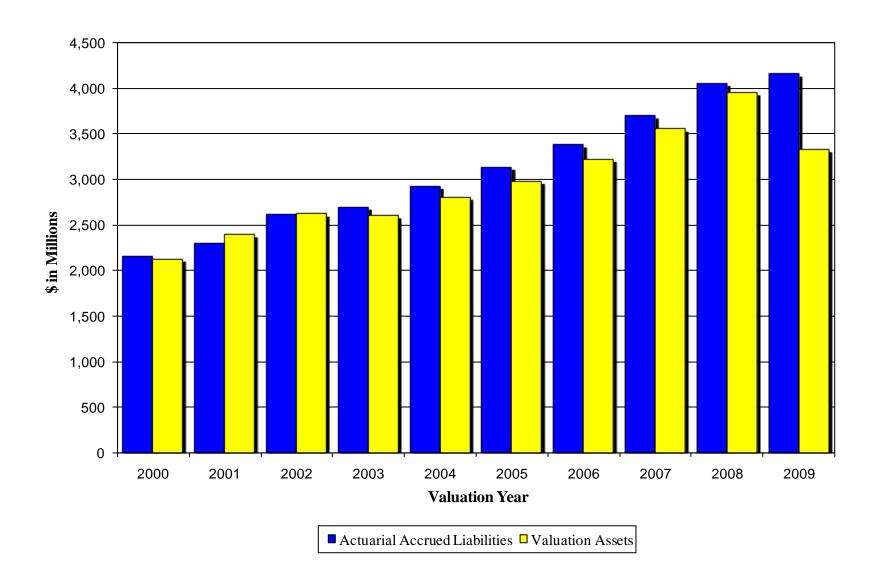
Each employer participating in the System is financially responsible for its own obligation. Accordingly, the aggregate numbers presented on this and the following pages are indicative only of the overall condition of the System and are not indicative of any one employer.

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

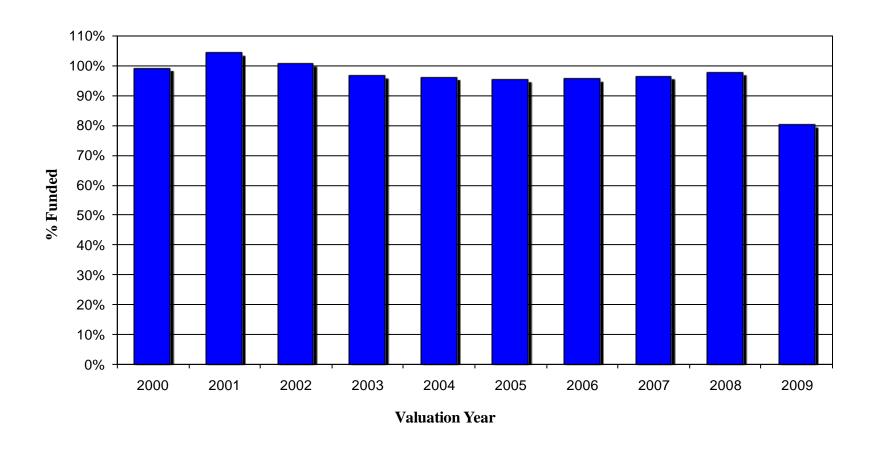
- Employers adopting new benefit programs. For example, before reflecting the benefit changes adopted by political subdivisions during the year, the 2-29-2008 and 2-28-2009 Funded Ratios would have been 97.8% (instead of 97.5%) and 80.2% (instead of 80.0%), respectively.
- New employers joining LAGERS (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.

Comparative Schedule

	Entr	y Age Accrued I					
	(1)	(2)	(3)		P	Portion of	
	Active	Retirants	Active Members		Accr	ued Lia	bility
Valuation	Member	and	(Employer Financed	Actuarial Value	Cove	red by A	Assets
Date	Contributions	Beneficiaries*	Portion)	of Assets	(1)	(2)	(3)
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
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

[#] Revised actuarial assumptions.

^{*} Includes reserve for future benefit increases.

EMPLOYERS ACCUMULATION FUND

The Employers Accumulation Fund assets totaled \$1,941,813,012 as of February 28, 2009 based on the actuarial value of assets. The individual participating Employers Accumulation Fund accrued liabilities (entry age normal cost method) were computed to be \$2,583,636,842 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.

Aggregate Accrued Liabilities and Actuarial Value of Assets Comparative Statement

	Actuarial	Aggregate	Ratio of
Valuation	Valuation Value		Assets to
Date	of Assets	Liabilities	Liabilities*
2-29-2000	\$1,198,046,097	\$1,222,471,046	98.0%
2-28-2001# 2-28-2002	1,412,925,554 1,543,329,341	1,319,829,586 1,532,806,161	107.1 100.7
2-28-2003 2-29-2004	1,601,631,161 1,697,031,492	1,697,957,140 1,817,296,008	94.3 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

[#] Revised actuarial assumptions.

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

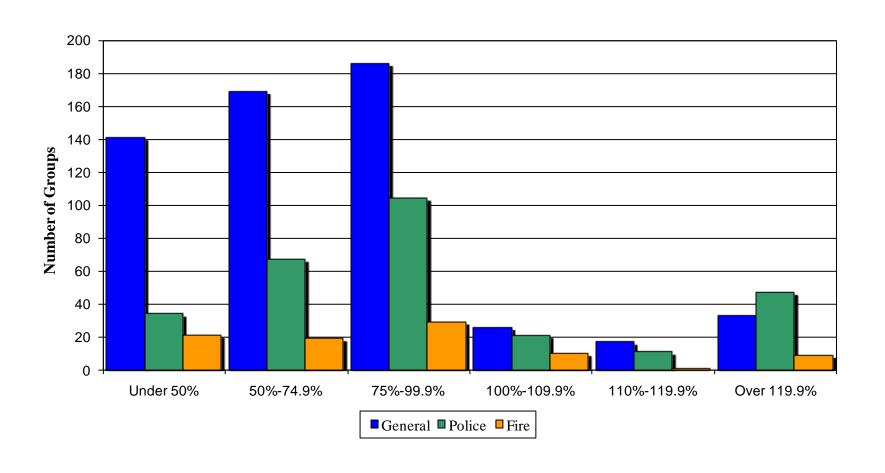
EMPLOYERS ACCUMULATION FUND PORTION OF LIABILITIES COVERED BY ASSETS BY VALUATION GROUPS FEBRUARY 28, 2009

		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	94	57	39	7	5	17	219
	10 - 49	40	74	82	13	10	13	232
	50 & up	<u>7</u>	<u>38</u>	<u>65</u>	<u>6</u>	<u>2</u>	<u>3</u>	<u>121</u>
	Totals	141	169	186	26	17	33	572
Police:	1 - 9	28	29	31	11	4	33	136
	10 - 49	6	29	60	10	7	14	126
	50 & up		<u>9</u>	<u>13</u>				<u>22</u>
	Totals	34	67	104	21	11	47	284
Fire:	1 - 9	13	8	9	1		8	39
	10 - 49	7	10	16	9	1	1	44
	50 & up	<u>1</u>	<u>1</u>	<u>4</u>				<u>6</u>
	Totals	21	19	29	10	1	9	89
Totals*		196	255	319	57	29	89	945

^{*} Not included in this tabulation are 34 groups which presently have no active members.

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

EMPLOYERS ACCUMULATION FUND PORTION OF LIABILITIES COVERED BY ASSETS



MEMBERS DEPOSIT FUND

The Members Deposit Fund assets for active members totaled \$86,881,969 as of February 28, 2009. The Members Deposit Fund actuarial accrued liabilities are set equal to assets.

Aggregate Actuarial Accrued Liabilities and Actuarial Value of Assets Comparative Statement

	Actuarial	Aggregate	Ratio of
Valuation	Valuation Value		Assets to
Date	of Assets	Liabilities	Liabilities
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
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

BENEFIT RESERVE FUND

The Benefit Reserve Fund assets as of February 28, 2009 totaled \$1,284,175,147 based on the actuarial value of assets. The present value of future benefits was computed to be \$1,473,463,652 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, 2008 and consisted of an overall increase of 4% or less.

Actuarial Accrued Liabilities and Accrued Assets Comparative Statement

				Present				Ratio of
Annual		Benefit	Investment	Value of	Reserve for		Actuarial	Actuarial Value
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
2-29-2000	\$ 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
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

[#] Revised actuarial assumptions.

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

CASUALTY RESERVE FUND

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%

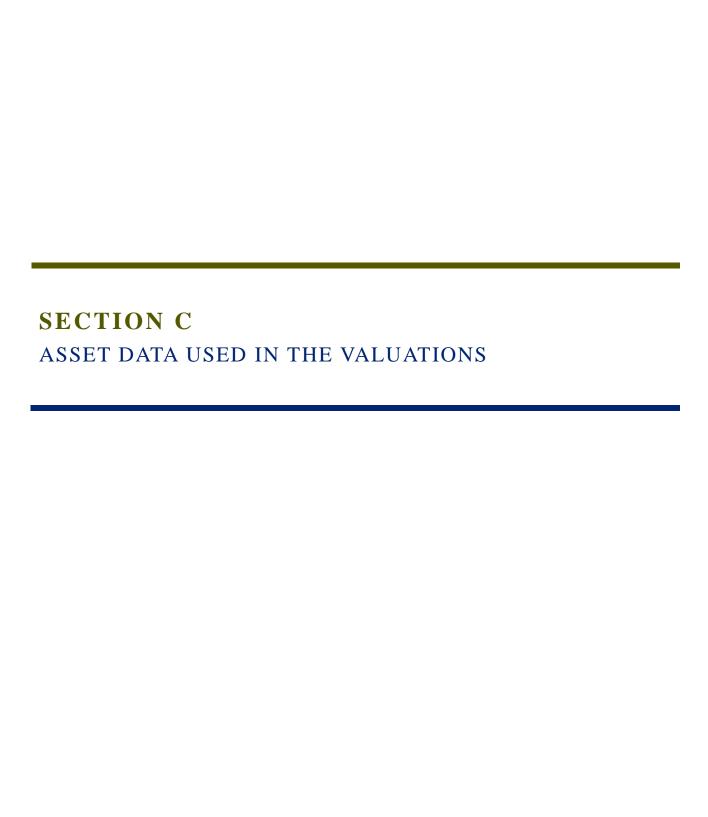
If there is a positive balance in the Casualty Reserve Fund at any time, it indicates that cumulative past contributions have fully funded the cumulative past obligations --- similarly, a negative balance would indicate that cumulative past contributions have fallen short of the target.

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

Actuarial Value of Assets at Valuation Dates Comparative Statement

Valuation	Employer L-1 Contributions:	Actuarial Value of	Accrued	Assets Express of Member	
Date	Year Ended	Assets	Liabilities	Total	Change
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
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

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



REPORTED ACCRUED ASSETS AVAILABLE FOR BENEFITS FEBRUARY 28, 2009

	Reported	Actuarial Value
Statutory Funds	Assets	of Assets
Employers Accumulation Fund	\$2,096,858,568	\$1,941,813,012
Members Deposit Fund	86,881,969	86,881,969
Benefit Reserve Fund	1,382,319,857	1,284,175,147
Casualty Reserve Fund	19,152,632	17,792,795
Total	\$3,585,213,026	\$3,330,662,923

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, 2009 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.

Presented below is 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

	Investment Credits as % of Fund Balance				
	Casualty	Member	Benefit	Employer	
	Reserve	Deposit	Reserve	Accumulation	Inflation
Year Ended	Fund	Fund	Fund	Fund	Loss %
June 30	A	В	C	D	(CPI)
2005	7.5%	4.0%	7.5%	7.7%	2.5%
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)
5 Year Compound Average		5.8%	5.9%	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 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).

DEVELOPMENT OF FUNDING VALUE OF RETIREMENT SYSTEM ASSETS

Ye	ar Ending February 28:	2005	2006	2007	2008
A.	Actuarial Value Beginning of Year	\$2,808,860,773	\$2,984,562,342	\$ 3,224,299,770	\$3,557,248,790
B.	Market Value End of Year	3,114,372,296	3,465,462,225	3,856,385,431	3,989,486,215
C.	Market Value Beginning of Year	2,831,382,994	3,114,372,296	3,465,462,225	3,856,385,431
D.	Non-Investment/Administrative Net Cash Flow	8,469,665	7,997,305	8,738,768	6,103,368
E.	Investment Income				
	E1. Market Total: B-C-D	274,519,637	343,092,624	382,184,438	126,997,416
	E2. Assumed Rate of Return	7.50%	7.50%	7.50%	7.50%
	E3. Amount for Immediate Recognition	210,982,170	224,142,075	242,150,187	267,022,536
	E4. Amount for Phased-In Recognition: E1-E3	63,537,467	118,950,549	140,034,251	(140,025,120)
F.	Phased-In Recognition of Investment Income				
	F1. Current Year: 0.20 x E4	12,707,493	23,790,110	28,006,850	(28,005,024)
	F2. First Prior Year	90,323,919	12,707,493	23,790,110	28,006,850
	F3. Second Prior Year	(72,768,306)	90,323,919	12,707,493	23,790,110
	F4. Third Prior Year	(46,455,168)	(72,768,306)	90,323,919	12,707,493
	F5. Fourth Prior Year	(27,558,204)	(46,455,168)	(72,768,307)	90,323,921
	F6. Total Recognized Phase-Ins	(43,750,266)	7,598,048	82,060,065	126,823,350
G.	Actuarial Value End of Year				
	G1. Preliminary Actuarial Value End of Year: A+D+E3+F6	\$2,984,562,342	\$3,224,299,770	\$ 3,557,248,790	\$3,957,198,044
	G2. Upper Corridor Limit: 120% x B	3,737,246,755	4,158,554,670	4,627,662,517	4,787,383,458
	G3. Lower Corridor Limit: 80% x B	2,491,497,837	2,772,369,780	3,085,108,345	3,191,588,972
	G4. Actuarial Value End of Year	\$2,984,562,342	\$3,224,299,770	\$ 3,557,248,790	\$3,957,198,044
H.	Difference Between Market & Actuarial Value	129,809,954	241,162,455	299,136,641	32,288,171
I.	Ratio of Actuarial Value to Market Value	95.8%	93.0%	92.2%	99.2%
J.	Actuarial Value Adjustment Factor (ratio of actuarial				
	value to EAF+MDF+CRF+BRF cost value)	1.2101	1.2127	1.1609	1.1810
K.	Recognized Rate of Return	5.94%	7.75%	10.04%	11.06%
L.	Market Rate of Return	9.68%	11.00%	11.01%	3.29%

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:	2009	2010	2011	2012	2013
A.	Actuarial Value Beginning of Year	\$3,957,198,044				
B.	Market Value End of Year	2,775,432,090				
C.	Market Value Beginning of Year	3,989,486,215				
D.	Non-Investment/Administrative Net Cash Flow	(7,132,095)				
E.	Investment Income					
	E1. Market Total: B-C-D	(1,206,922,030)				
	E2. Assumed Rate of Return	7.50%				
	E3. Amount for Immediate Recognition	296,522,400				
	E4. Amount for Phased-In Recognition: E1-E3	(1,503,444,430)				
F.	Phased-In Recognition of Investment Income					
	F1. Current Year: 0.20 x E4	(300,688,886)				
	F2. First Prior Year	(28,005,024)	\$ (137,718,790)			
	F3. Second Prior Year	28,006,850	(28,005,024)	\$ (137,718,790)		
	F4. Third Prior Year	23,790,110	28,006,850	(28,005,024)	\$ (137,718,790)	
	F5. Fourth Prior Year	12,707,495	23,790,111	28,006,851	(28,005,024)	\$ (137,718,788)
	F6. Total Recognized Phase-Ins	(264,189,455)	(113,926,853)	(137,716,963)	(165,723,814)	(137,718,788)
G.	Actuarial Value End of Year					
	G1. Preliminary Actuarial Value End of Year: A+D+E3+F6	\$3,982,398,894				
	G2. Upper Corridor Limit: 120% x B	3,330,518,508				
	G3. Lower Corridor Limit: 80% x B	2,220,345,672				
	G4. Actuarial Value End of Year	\$3,330,518,508				
H.	Difference Between Market & Actuarial Value	(555,086,418)	(441,159,565)	(303,442,602)	(137,718,788)	
I.	Ratio of Actuarial Value to Market Value	120.0%				
J.	Actuarial Value Adjustment Factor (ratio of actuarial					
	value to EAF+MDF+CRF+BRF cost value)	0.9290				
K.	Recognized Rate of Return	(15.67)%				
L.	Market Rate of Return	(30.28)%				

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.

SUMMARY OF CURRENT ASSET INFORMATION REPORTED FOR VALUATION

Reported Assets (Including Income/Expense Reserve)

Market Value - February 28, 2009			
Cash & equivalents	\$ 41,710,888		
Receivables & accruals	1,053,374		
Stocks	1,282,195,006		
Bonds & government securities	1,099,443,387		
Timber	198,426,738		
Miscellaneous	152,602,696		
Total Current Assets	\$ 2,775,432,090		

Revenues and Expenses

Market Value	Year Ended	Year Ended
warket value	February 29, 2008	February 28, 2009
Balance - Beginning of year	\$ 3,856,385,431	\$ 3,989,486,215
Revenues:		
Employees' contributions	7,865,669	8,170,481
Employer contributions	133,080,381	132,951,352
Investment income	140,826,585	(1,170,287,594)
Total	281,772,635	(1,029,165,761)
Expenditures:		
Benefit payments	132,313,609	145,365,982
Refund of member contributions	2,529,073	2,887,946
Administrative and investment expenses	13,829,169	36,634,436
Total	148,671,851	184,888,364
Balance - End of Year	\$ 3,989,486,215	\$ 2,775,432,090



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, 2008 TO FEBRUARY 28, 2009

Unfunded Accrued Liabilities (UAL), March 1	\$101,760,275
Employer Normal Cost	116,818,587
Employer Contributions	132,951,352
Interest	7,027,042
Expected UAL Before Any Changes	92,654,552
Change from Benefit Changes Plus New Employers	17,528,942
Change from Revised Actuarial Assumptions	0
Expected UAL After All Changes	110,183,494
Actual UAL	831,112,335
Gain/(Loss) for Year From Financial Experience	\$(720,928,841)

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, 2009

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 2/28/2009
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.	\$ (1,603,596)
Death-in-Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	1,026,322
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	1,111,855
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	42,975,818
Investment Income. If there is greater investment return on assets than assumed, there is a gain. If less return, a loss.	(916,069,841)
Retiree, Beneficiary and Deferred Activity. Includes members living longer than expected, COLA increases different than expected, etc.	(8,540,173)
Benefit Reserve Fund. Release of reserve for future experience.	173,069,425
Other. Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, valuation methods, etc.	(12,898,651)
Gain (or Loss) During Year From Experience	\$ (720,928,841)

INVESTMENT GAIN (LOSS) FOR THE YEAR ENDED FEBRUARY 28, 2009

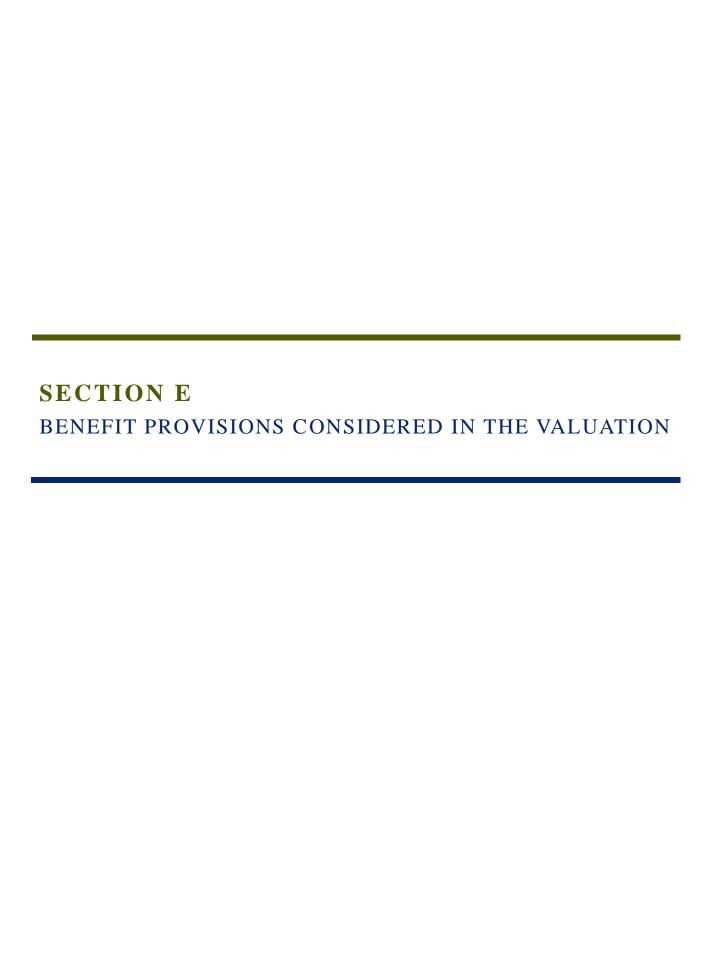
Assets, Beginning of Year	\$3,957,198,044
Net Cash Flow	(7,132,095)
Assumed Investment Return	296,522,400
Expected Assets End of Year	4,246,588,349
Actual Assets End of Year	3,330,518,508
Gain/(Loss) for Year	\$(916,069,841)

ACTIVE MEMBER POPULATION RECONCILIATION MARCH 1, 2008 TO FEBRUARY 28, 2009

	Actual	Expected
Active Members Beginning of Year	31,187	
Plus New Hires	4,320	
Minus Retirements*	689	946.4
Minus Deaths	32	51.4
Minus Disabilities	44	#
Minus Other Terminations	2,451	2,005.7
Active Members End of Year	32,291	

^{*} Actual retirements include 65 retirees at or above the age where retirements are assumed to occur 100% of the time. Expected retirements include 293 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.



MISSOURI LOCAL GOVERNMENT EMPLOYEES RETIREMENT SYSTEM BRIEF SUMMARY OF LAGERS

BENEFITS AND CONDITIONS EVALUATED AND/OR CONSIDERED THROUGH FEBRUARY 28, 2009

(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 <u>L</u>OC<u>A</u>L <u>G</u>OVERNMENT <u>E</u>MPLOYEES <u>R</u>ETIREMENT <u>S</u>YSTEM BRIEF SUMMARY OF LAGERS

BENEFITS AND CONDITIONS EVALUATED AND/OR CONSIDERED THROUGH FEBRUARY 28, 2009 (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 <u>L</u>OC<u>A</u>L <u>G</u>OVERNMENT <u>E</u>MPLOYEES <u>R</u>ETIREMENT <u>S</u>YSTEM BRIEF SUMMARY OF LAGERS

BENEFITS AND CONDITIONS EVALUATED AND/OR CONSIDERED THROUGH FEBRUARY 28, 2009

(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 IN EFFECT AS OF FEBRUARY 28, 2009

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 2009 actuarial valuations were made, the Benefit Programs evaluated were as follows:

			Benefit Programs																							
						N	on-Co	ntribut	ory					Contributory												
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	47	33	2	5	18	44	9	5	2		4	3	41	24	1		12	14	4	3				1	272
	Police	22	16	1	2	10	31	4	4			3		20	12			7	8	2					1	143
	Fire	<u>3</u>	<u>3</u>	1	<u>1</u>	3	9	4	_	_		<u>3</u>	<u>1</u>	<u>5</u>	<u>3</u>	_		2	2	_	_				_	<u>40</u>
	Totals	72	52	4	8	31	84	17	9	2		10	4	66	39	1		21	24	6	3				2	455
3 yr.	General	21	19		5	41	56	23	11	9	2	16	7	22	16	1	2	20	29	3	5	2		3	1	314
	Police	9	8		5	19	24	17	9	5	0	10	5	7	4	1	2	13	11	2	2			2	1	156
	Fire	<u>6</u>	2		<u>3</u>	<u>6</u>	<u>5</u>	<u>10</u>	<u>4</u>	3	2	2	2	_	<u>1</u>	_	2	2	2	_	_	_		2	_	<u>54</u>
	Totals	36	29		13	66	85	50	24	17	4	28	14	29	21	2	6	35	42	5	7	2		7	2	524

The above LT columns include both the LT(62) *and LT*(65) *benefit programs. The table includes 34 groups with no active members.*

SECTION FPARTICIPANT DATA

PARTICIPATING EMPLOYERS EVALUATED FEBRUARY 28, 2009

	Number of
Type of Group	Participating Employers
General Only	269
Fire Only	13
General and Police	220
General and Fire	12
General and Police and Fire	64
Total	578

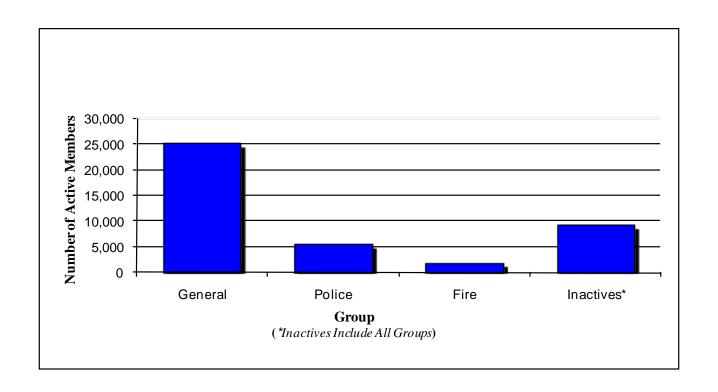
ACTIVE AND INACTIVE MEMBERS IN VALUATIONS FEBRUARY 28, 2009

	Num	ber of	
Classification	Members	Valuation Groups*	Annual Payroll
Active Members			
General	25,100	572	\$ 962,287,486
Police	5,427	284	236,529,110
Fire	1,764	89	<u>87,135,445</u>
Total Actives	32,291	945	\$1,285,952,041
Inactive Members #	9,143		
Total Members	41,434		

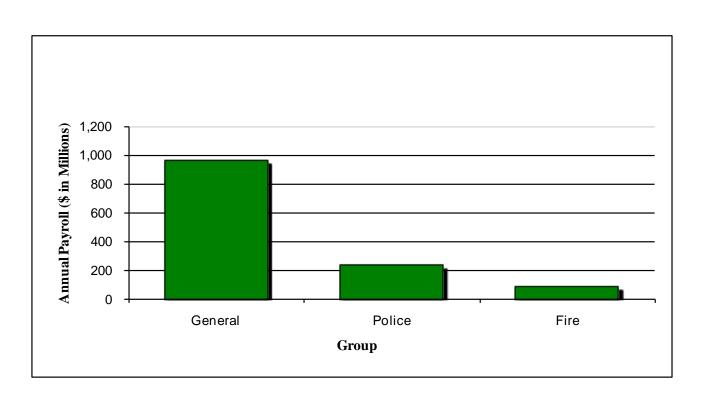
^{*} Each Police group and each Fire group is evaluated separately. Each General group is evaluated separately, but also may be broken into sub-groups for separate financial experience if the employer desires separate employer rates for internal accounting purposes.

[#] 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 5,978 linked members included in the above total.

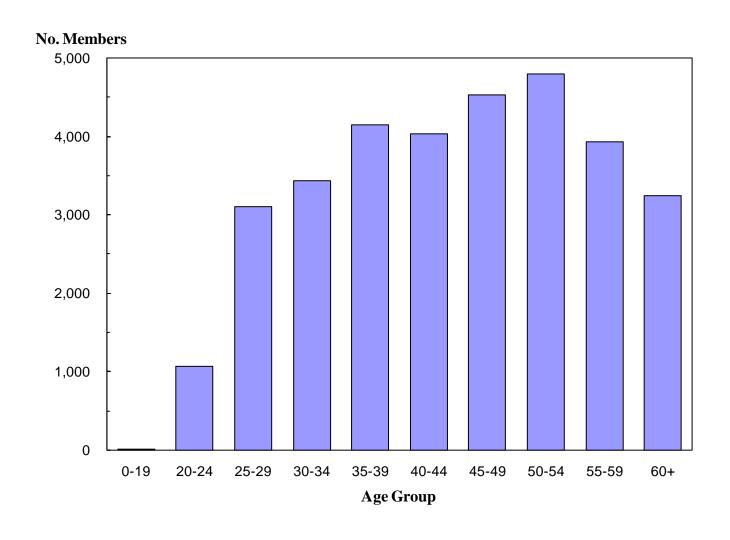
ACTIVE MEMBERS BY GROUP



ANNUAL PAYROLL BY GROUP

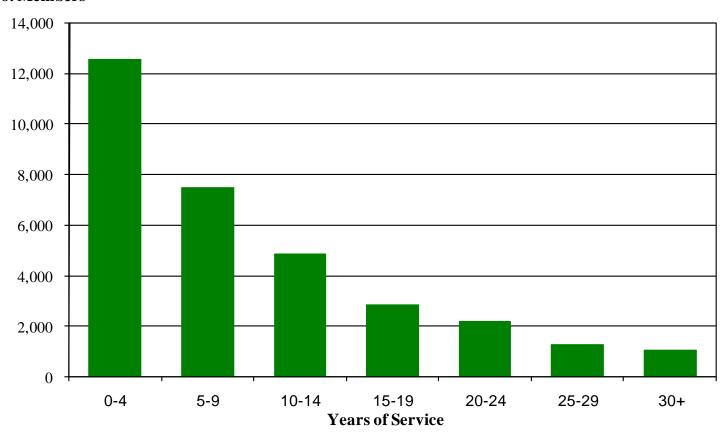


DISTRIBUTION OF ACTIVE MEMBERS BY AGE FEBRUARY 28, 2009



DISTRIBUTION OF ACTIVE MEMBERS BY SERVICE FEBRUARY 28, 2009

No. Members



GENERAL MEMBERS - MEN ACTIVE AS OF FEBRUARY 28, 2009 BY ATTAINED AGE AND YEARS OF SERVICE

		Years	of Serv	rice 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
Under 20	6							6	\$ 141,714
20-24	459	6						465	12,668,870
25-29	850	242	4					1,096	35,872,261
30-34	722	420	126	3				1,271	47,756,066
35-39	614	448	289	95	1			1,447	60,018,104
40-44	588	426	321	233	111	4		1,683	73,915,920
45-49	595	437	375	256	269	141	14	2,087	92,415,309
50-54	483	416	352	225	273	233	182	2,164	98,303,253
55-59	411	327	289	213	221	176	250	1,887	86,850,739
60	71	64	50	36	26	21	39	307	13,459,317
61	64	63	35	43	27	33	32	297	13,921,492
62	62	51	48	23	23	16	33	256	11,762,170
63	33	39	18	14	11	10	10	135	5,451,641
64	22	20	26	9	10	13	5	105	4,586,918
65	15	28	24	15	12	4	13	111	4,748,803
66	20	26	15	5	7	9	3	85	3,284,150
67	13	23	9	6	4	0	5	60	2,432,375
68	11	10	6	3	4	0	3	37	1,530,649
69	9	10	8	3	5	0	0	35	1,178,826
70 & Over	24	31	30	19	11	4	12	131	4,669,196
Totals	5,072	3,087	2,025	1,201	1,015	664	601	13,665	\$574,967,773

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

Age: 45.6 years Service: 10.4 years Annual Pay: \$42,076

GENERAL MEMBERS - WOMEN ACTIVE AS OF FEBRUARY 28, 2009 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	6							6	\$ 97,806
20-24	312	2						314	7,418,483
25-29	802	158	2					962	27,990,814
30-34	626	295	66	1				988	31,187,603
35-39	626	369	225	73	2			1,295	44,066,943
40-44	554	354	240	126	56	2		1,332	46,719,322
45-49	577	463	283	160	130	63	6	1,682	59,142,005
50-54	521	464	370	218	153	104	68	1,898	68,636,767
55-59	373	379	288	235	142	82	78	1,577	55,315,917
60	58	58	57	35	28	15	17	268	9,459,997
61	53	43	46	32	19	12	17	222	7,410,966
62	48	53	46	36	32	16	21	252	8,858,247
63	27	40	30	27	13	9	6	152	5,142,199
64	19	23	30	18	8	1	7	106	3,600,913
65	12	24	28	14	8	11	9	106	3,480,244
66	13	15	15	10	9	4	7	73	2,451,115
67	5	9	7	6	5	2	4	38	1,262,420
68	5	3	13	2	8	5	2	38	1,153,333
69	7	9	7	4	3	3	0	33	1,007,847
70 & Over	7	19	19	18	14	3	13	93	2,916,772
Totals	4,651	2,780	1,772	1,015	630	332	255	11,435	\$387,319,713

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

Age: 45.9 years Service: 9.0 years Annual Pay: \$33,871

POLICE MEMBERS ACTIVE AS OF FEBRUARY 28, 2009 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	212	0						212	6,740,757
25-29	712	94	0					806	28,817,522
30-34	509	370	67	0				946	37,127,355
35-39	344	357	307	38	0			1,046	46,207,244
40-44	194	156	194	164	38	1		747	34,645,106
45-49	115	98	85	90	123	19	0	530	26,146,209
50-54	72	72	67	86	120	86	32	535	27,585,917
55-59	45	51	55	40	53	41	61	346	17,386,969
60	8	9	3	7	13	9	7	56	2,791,411
61	4	12	5	12	3	5	7	48	2,148,205
62	4	17	8	8	5	1	5	48	2,277,057
63	4	6	4	7	8	1	1	31	1,369,344
64	4	4	5	2	2	1	2	20	930,008
65	3	3	2	1	1	0	2	12	506,666
66	2	3	3	4	1	2	1	16	738,946
67	0	2	4	1	0	0	1	8	447,810
68	1	0	0	0	0	0	1	2	80,401
69	0	1	2	1	0	0	0	4	178,886
70 & Over	2	5	1	3	1	0	2	14	403,297
Totals	2,235	1,260	812	464	368	166	122	5,427	\$236,529,110

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

Age: 39.8 years Service: 9.0 years Annual Pay: \$43,584

FIRE MEMBERS ACTIVE AS OF FEBRUARY 28, 2009 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	72	0						72	\$ 2,398,557
25-29	212	25	0					237	8,840,282
30-34	119	83	24	0				226	9,819,444
35-39	118	120	103	16	0			357	17,031,416
40-44	47	67	77	62	23	1		277	14,490,284
45-49	28	26	34	52	68	18	0	226	12,878,179
50-54	11	19	16	20	48	66	25	205	12,097,344
55-59	5	8	8	12	20	22	44	119	7,183,507
60	3	1	1	1	3	1	7	17	849,993
61	0	1	1	1	0	1	3	7	433,656
62	1	0	0	0	0	1	5	7	424,309
63	1	0	1	0	0	0	2	4	203,285
64	0	0	0	0	0	0	1	1	55,267
65	1	0	1	0	1	0	0	3	145,980
66	0	0	0	1	0	0	1	2	91,810
67	0	0	0	0	0	0	0	0	0
68	0	0	0	0	0	0	0	0	0
69	0	0	0	0	1	0	0	1	67,166
70 & Over	0	1	1	0	0	0	1	3	124,966
Totals	618	351	267	165	164	110	89	1,764	\$87,135,445

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

Age: 40.2 years Service: 11.2 years Annual Pay: \$49,397

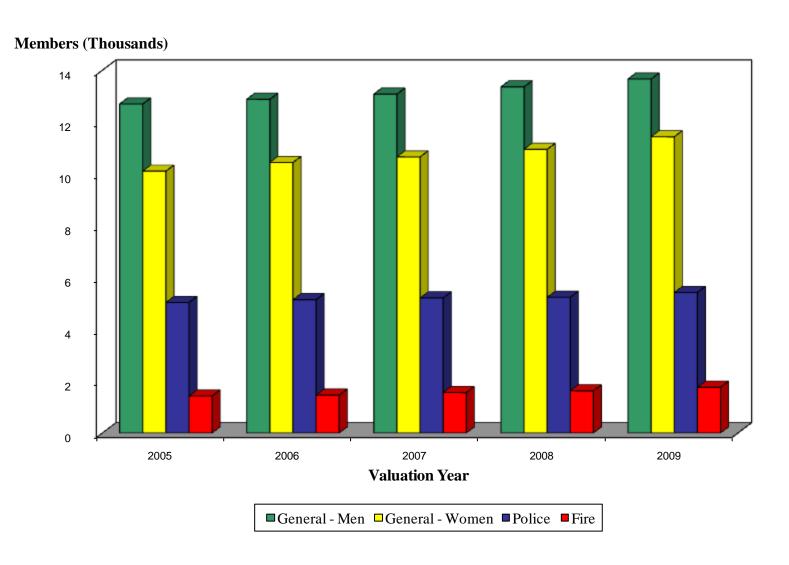
PARTICIPATING EMPLOYERS AND MEMBERS IN VALUATIONS 10 YEAR COMPARATIVE STATEMENT

	Numbe	r of		Active Men	nbe rs									
							Inflation							
Valuation	Participating	Valuation		Annual	Average	%	Increase %							
Date	Employers	Groups	Number	Payroll	Pay	Increase	(C.P.I.)							
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							
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							
			10 Ye	ear Compound Avo	10 Year Compound Average 3.5%									

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 F	Payroll	Increase %
Group	at 2-28	Members	Age	Service	Average	Change	(C.P.I)
General - Men	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
	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
General - Women	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
	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
Police	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
	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
Fire	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
	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

ACTIVE MEMBERS BY GROUP 2005-2009



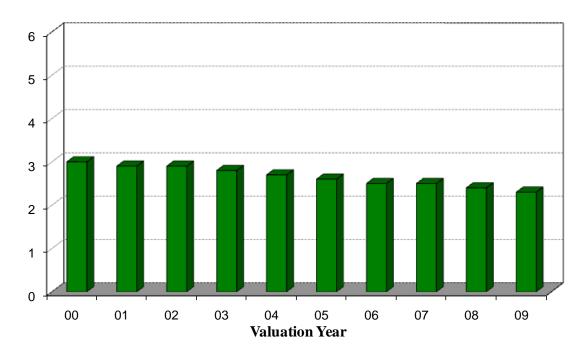
RETIRANTS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS 10 YEAR COMPARATIVE STATEMENT

-	Ade	ded to Rolls	Remo	oved from Rolls	Rolls	End of Year			Retired Live to Active	
Year Ended	No.	Annual Allowances*	No.	Annual Allowances	No.	Annual Allowances	% Incr. in Annual Allowances	Average Annual Allowances	Active Members Per Benefit Recipient	S Allowances as Percents of Active Payroll
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	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

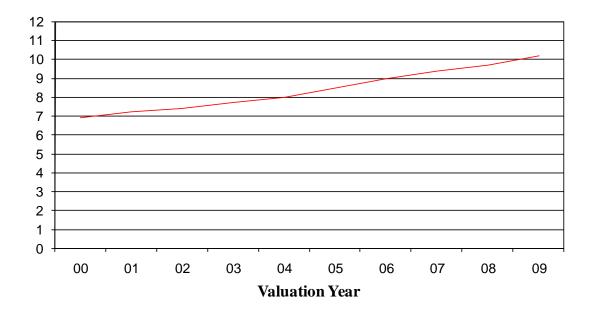
^{*} Includes post-retirement adjustments.

RETIRANTS AND BENEFICIARIES COMPARATIVE DATA

Active Members Per Benefit Recipient



Allowances as % of Active Pay



RETIRANTS AND BENEFICIARIES ON ROLLS FEBRUARY 28, 2009 BY DISBURSING FUND AND TYPE OF BENEFIT BEING PAID

Type of Benefit	Number	Annual Allowances
Service Early & Deferred		
Life Option	6,215	\$ 57,614,251
Option A	2,102	22,582,409
Option B	1,366	19,778,357
Option C	1,308	10,219,056
Beneficiary Receiving	1,061	6,066,883
Totals	12,052	116,260,956
Duty Disability		
Life Option	285	4,138,756
Option A	112	1,359,648
Option B	50	712,498
Option C	<u>35</u>	465,096
Totals	482	6,675,998
Non-Duty Disability		
Life Option	264	1,961,327
Option A	130	1,114,671
Option B	49	461,193
Option C	74	495,058
Totals	517	4,032,249
Beneficiary Receiving	216	1,104,201
Total Disability	1,215	11,812,448
Death-In-Service		
Spouse Receiving	592	3,152,903
Children Receiving	<u>47</u>	113,927
Totals	639	3,266,830
Totals	13,906	\$131,340,234

SECTION G

COMPUTED EMPLOYER CONTRIBUTIONS: SUMMARY OF COMPUTED INDIVIDUAL RATES

COMPUTED EMPLOYER CONTRIBUTIONS: NON-CONTRIBUTORY PLANS BY VALUATION GROUPS AS OF FEBRUARY 28, 2009

	Number of Valuation Groups						
	Under	2.00-	5.00-	Over			
Group	2.00%	4.99%	7.99%	8.00%	Totals		
Benefit Program L-1							
General	10	12	28	13	63		
Police	9	8	8	4	29		
Fire	<u>1</u>	<u>0</u>	<u>6</u>	<u>2</u>	<u>9</u>		
Total	20	20	<u>6</u> 42	19	101		
Benefit Program L-3							
General	10	6	15	20	51		
Police	6	1	5	11	23		
Fire	<u>0</u>	<u>1</u>	<u>0</u>	<u>4</u>	<u>5</u>		
Total	16	8	20	35	79		
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	$\overline{0}$	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	4		
Benefit Program LT-5(62)							
General	0	1	2	1	4		
Police	0	2	0	1	3		
Fire	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>		
Total	0	4	<u>0</u> 2	2	8		
Benefit Program LT-5(65)							
General	0	4	1	1	6		
Police	3	0	1	0	4		
Fire	<u>1</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>3</u>		
Total	<u>1</u> 4	<u>1</u> 5	<u>0</u> 2	$\frac{1}{2}$	<u>3</u> 13		
Benefit Program L-6							
General	3	0	3	53	59		
Police	2	2	2	23	29		
Fire	<u>1</u>	<u>0</u>	<u>0</u>	<u>6</u>	<u>7</u>		
Total	6	2	<u>0</u> 5	82	95		
Benefit Program L-7							
General	5	18	29	45	97		
Police	10	11	16	16	53		
Fire	<u>4</u>	<u>2</u>	<u>4</u>	<u>4</u>	<u>14</u>		
Total	19	31	49	65	164		

COMPUTED EMPLOYER CONTRIBUTIONS: NON-CONTRIBUTORY PLANS BY VALUATION GROUPS AS OF FEBRUARY 28, 2009 (CONTINUED)

	Number of Valuation 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	1	1	0	2		
Fire	0	<u>0</u>	<u>1</u>	<u>2</u>			
Total	<u>0</u> 0	3	2	4	<u>3</u> 9		
Benefit Program LT-8(65)							
General	0	2	13	12	27		
Police	1	2	5	10	18		
Fire	1	<u>1</u>		<u>5</u>	<u>11</u>		
Total	$\frac{1}{2}$	5	<u>4</u> 22	27	56		
Benefit Program L-9							
General	1	2	5	8	16		
Police	1	4	3	5	13		
Fire	2	<u>0</u>	<u>1</u>	<u>1</u>	<u>4</u>		
Total	<u>2</u> 4	6	9	14	33		
Benefit Program LT-10(65)							
General	1	0	1	9	11		
Police	1	1	0	3	5		
Fire	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>3</u>		
Total	2	1	1	15	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>2</u>	<u>2</u>		
Total	0	0	0	3	<u>2</u> 3		
Benefit Program L-12							
General	2	1	3	14	20		
Police	3	1	4	5	13		
Fire	<u>1</u>	<u>0</u>	<u>0</u>	<u>4</u>	<u>5</u>		
Total	6	2	<u>0</u> 7	23	38		
Benefit Program LT-14(65)							
General	0	1	3	6	10		
Police	1	0	1	3	5		
Fire	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>3</u>		
Total	1	1	<u>0</u> 4	12	18		
Totals*	80	88	166	306	640		

^{*} There are nineteen 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, 2009

	Number of Valuation Groups						
	Under	2.00-	5.00-	Over			
Group	2.00%	4.99%	7.99%	8.00%	Totals		
Benefit Program L-1							
General	8	18	21	15	62		
Police	3	8	9	4	24		
Fire	<u>0</u>	<u>0</u>	<u>3</u>	<u>2</u>	<u>5</u>		
Total	11	26	33	21	91		
Benefit Program L-3							
General	7	9	12	11	39		
Police	2	8	5	0	15		
Fire	<u>0</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>4</u>		
Total	9	17	20	12	58		
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	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	<u>0</u> 2	$\overline{2}$		
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	<u>0</u> 0	0	<u>0</u> 0	0	0		
Benefit Program LT-5(65)							
General	0	2	0	0	2		
Police	0	0	1	1	2		
Fire	<u>0</u> 0	$\frac{0}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	<u>2</u>		
Total	0	2	2	2	6		
Benefit Program L-6							
General	0	3	8	20	31		
Police	5	0	4	10	19		
Fire	<u>1</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>4</u>		
Total	<u>1</u> 6	3	12	33	54		
Benefit Program L-7							
General	3	11	13	16	43		
Police	3	7	6	2	18		
Fire	<u>0</u> 6	<u>0</u>	<u>0</u>	<u>2</u>	<u>2</u>		
Total	6	18	19	20	63		

COMPUTED EMPLOYER CONTRIBUTIONS: CONTRIBUTORY PLANS BY VALUATION GROUPS AS OF FEBRUARY 28, 2009 (CONTINUED)

	Number of Valuation 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>o</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	0	0	0	0	<u>0</u>		
Total	<u>0</u> 0	<u>0</u> 5	$\frac{0}{2}$	$\frac{0}{2}$	9		
Benefit Program L-9							
General	4	0	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	4	1	3	1	9		
Benefit Program LT-10(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	$\overline{0}$	1	1	$\frac{1}{2}$		
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	1	1	2		
Fire	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>		
Total	0	0	1	<u>1</u> 5	6		
Benefit Program LT-14(65)							
General	0	0	0	2	2		
Police	0	1	0	1	2		
Fire	$\frac{0}{0}$	<u>0</u>	<u>0</u>	<u>0</u>	$\frac{0}{4}$		
Total	0	1	0	3	4		
Totals*	36	73	94	102	305		

^{*} There are fifteen contributory groups presently without active members. They are not included in the totals.



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 15year 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. 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.

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 FOR MALES PROJECTED TO 2000, SETBACK 1 YEAR FOR MEN AND 7 YEARS FOR WOMEN, & I=7.5%)

_	Monthly 1	lue of \$1.00 Increasing Life	Future Life Expectancy (years)		
Sample 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 Eligib	ility	V	With Rule of 80 Eligibility			
	Ger	ne ral*			Ge	ne ral	_	-	
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

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

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

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

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 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 ContributionsContributions 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.

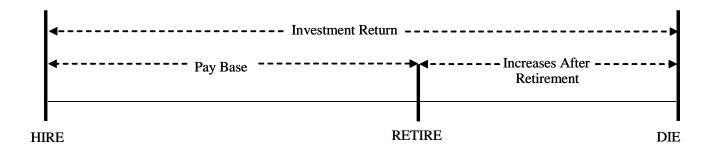
Deferred Members

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, and therefore has a greater effect.

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.

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		Cash	Bonds (L	ong Term)				
Ended	Inflation	Equiv.	US	Corporate	Stocks	Real Re	eturn for Sa	mple Fund
December	(CPI)	(T Bills)	Treasury	(Sol. Bro.)	(S & P 500)	A	В	С
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
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)
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
5/2008	2.7	0.3	7.5	3.0	(4.8)	2.4	0.6	(1.2)
30/2008	3.8	1.9	6.2	5.4	6.9	6.2	6.5	6.6

Sample Funds (only three of many reasonable samples)

	A	В	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 "Baby Boomers" begin to swell the retired population?

LAGERS RETAINER ACTUARIAL FEES 10 YEAR COMPARATIVE STATEMENT

				Average Fee per Group	
Valuation	Number of		Consumer		
Date	Valuation	Annual Actuarial Fees	Price Index	Unadjusted	1967*
As of	Groups	(nearest \$1)	(1967 is 100)	Dollars	Dollars
2-29-2000	747	\$169,995	508.700	\$228	\$45
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

^{*} 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.



September 3, 2009

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, 2009 annual actuarial valuations* for the participating employers of the Missouri Local Government Employees Retirement System. We have sent individual copies to each of the Board members.

Sincerely,

Mita Drazilov
Mita D. Drazilov

MDD:JAK:rmg Enclosures

cc: Board Members

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