GRS Gabriel Roeder Smith & Company
Consultants & Actuaries

MISSOURI LOCAL GOVERNMENT EMPLOYEES RETIREMENT SYSTEM

Compiled 43rd Annual Actuarial Valuations

As of February 28, 2011

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Report of Compiled Actuarial Valuations of LAGERS

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August 29, 2011

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

Submitted in this report are the compiled results of the ***43rd annual actuarial valuations*** for the Missouri Local Government Employees Retirement System, as amended through February 28, 2011. ***The date of the valuations*** was February 28, 2011.

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 ***995 groups (608 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.

This report was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as: plan experience differing from that anticipated by the economic and demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

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 assumptions used in performing the 2011 valuations were adopted by the Board in conjunction with a five year experience investigation for the period ending February 28, 2010.

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 2011 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) 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

Judith A. Kermans, EA, MAAA, FCA

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COMMENTS ON VALUATION RESULTS

Individual Valuations of Participating Employers. There were 995 new employer contribution rates computed as of February 28, 2011. (Thirty groups had no active employees and a dollar contribution was calculated for them. These thirty groups are excluded from the totals on this page.) Of the 995 new rates, 230 were decreases from the previous rates, 724 were increases from the previous rates and 41 were unchanged. Further detail is shown in Section G. A ten year comparative schedule follows:

Valuation Date	Decreases	Unchanged	Increases	Total
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
2-28-2011*	**230**	**41**	**724**	**995**

* *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 new assumptions recently adopted. In addition, many groups were at the 1% "employer cap" last year due to worse than expected investment return on an actuarial value of assets basis in prior years. Employer contribution rates will continue to experience upward pressure until groups reach the "employer cap."

Experience During Valuation Year. Investment return was above the assumed rate of return on a market value of assets basis as of February 28, 2011. This helped to offset the phase-in effects of the unrecognized market loss from the year ended February 28, 2009. 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 11%. (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, 2011, the System experienced an actuarial gain of approximately $182 million. This consisted of a 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 89.1% to 91.5% as of February 28, 2011, 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 81.6% based on the actuarial value of assets. If the market value of assets were used, the funded ratio would be approximately 91%.

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.

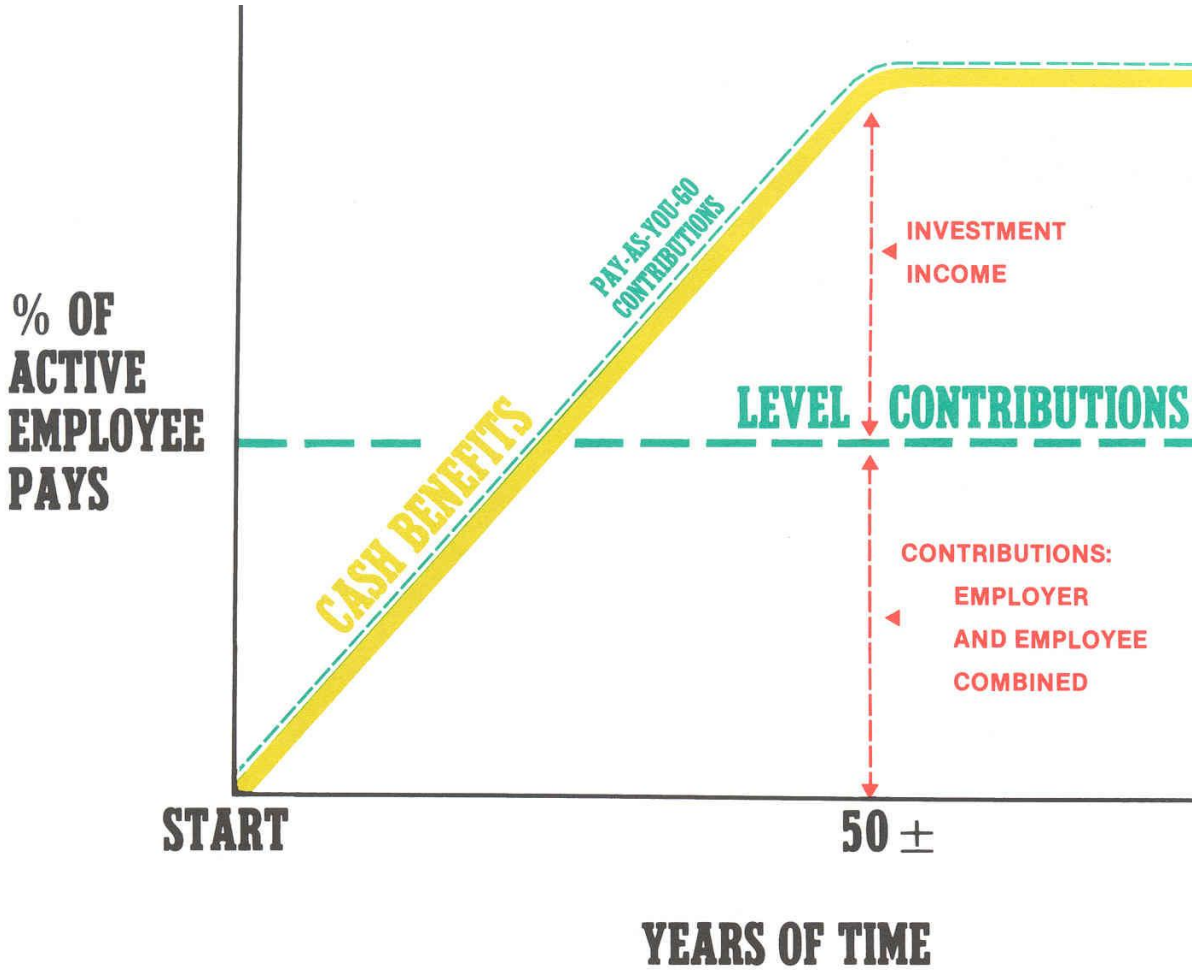
In making an actuarial valuation the system must assume what the above experience will be, for the next year and for decades in the future. Only the subsequent actual experience of the System can indicate the degree of accuracy of the assumptions.

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 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.***

SECTION B

VALUATION RESULTS

CHANGE IN EMPLOYER CONTRIBUTIONS*
BY VALUATION GROUPS FEBRUARY 28, 2011

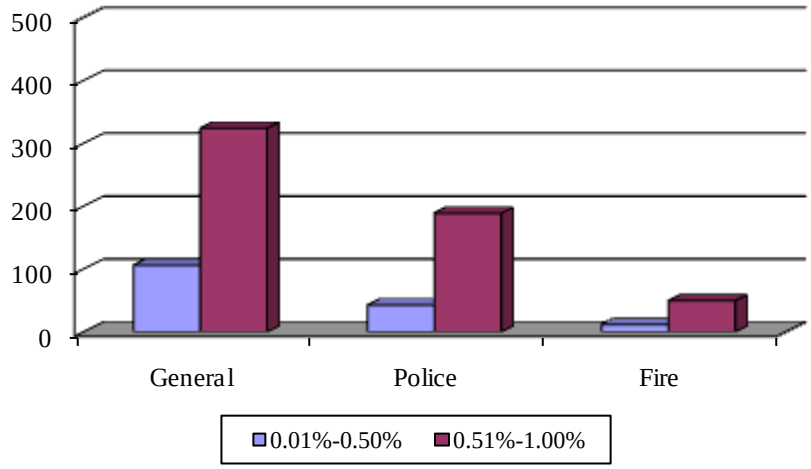
Group	Number of Active Members	Number of Valuation Groups with Indicated Change in Employer Contribution Rate						
		Decreases				Increases		
		Over 1.00%	0.51% to 1.00%	0.01% to 0.50%	Unchanged 0.00%	0.01% to 0.50%	0.51% to 1.00%	Totals
General:	1 - 9	8	22	47	12	59	102	250
	10 - 49	8	16	36	9	27	130	226
	50 & up	—	3	4	8	20	92	127
	Totals	16	41	87	29	106	324	603
Police:	1 - 9	8	14	15	4	27	64	132
	10 - 49	3		14	3	14	103	137
	50 & up	—	—	—	1	2	22	25
	Totals	11	14	29	8	43	189	294
Fire:	1 - 9	2	2	11	1	10	14	40
	10 - 49	2	2	13	2	2	30	51
	50 & up	—	—	—	1	—	6	7
	Totals	4	4	24	4	12	50	98
Totals		**31**	**59**	**140**	**41**	**161**	**563**	**995**

* *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.*

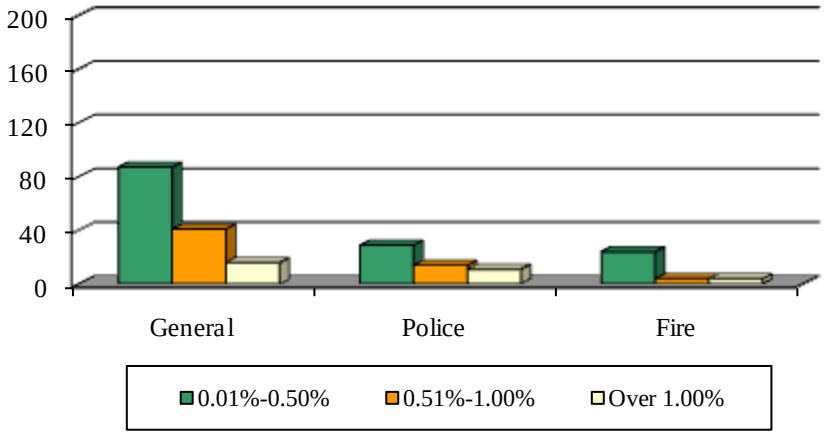
In broad terms, the smaller the group, the greater the chance of a relatively large change in employer rate from one year to the next.

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 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.

Valuation Date	(a) Actuarial Value of Assets	(b) Entry Age Actuarial Accrued Liability	(b-a) Unfunded Accrued Liability (UAL)	(a/b) Funded Ratio	(c) Annual Covered Payroll	[(b-a)/c] UAL as a % of Covered Payroll
2-28-2002	$ 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
2-28-2011 #	3,945,085,880	4,837,423,311	892,337,431	81.6	1,350,646,560	66.1

 # Revised actuarial assumptions.

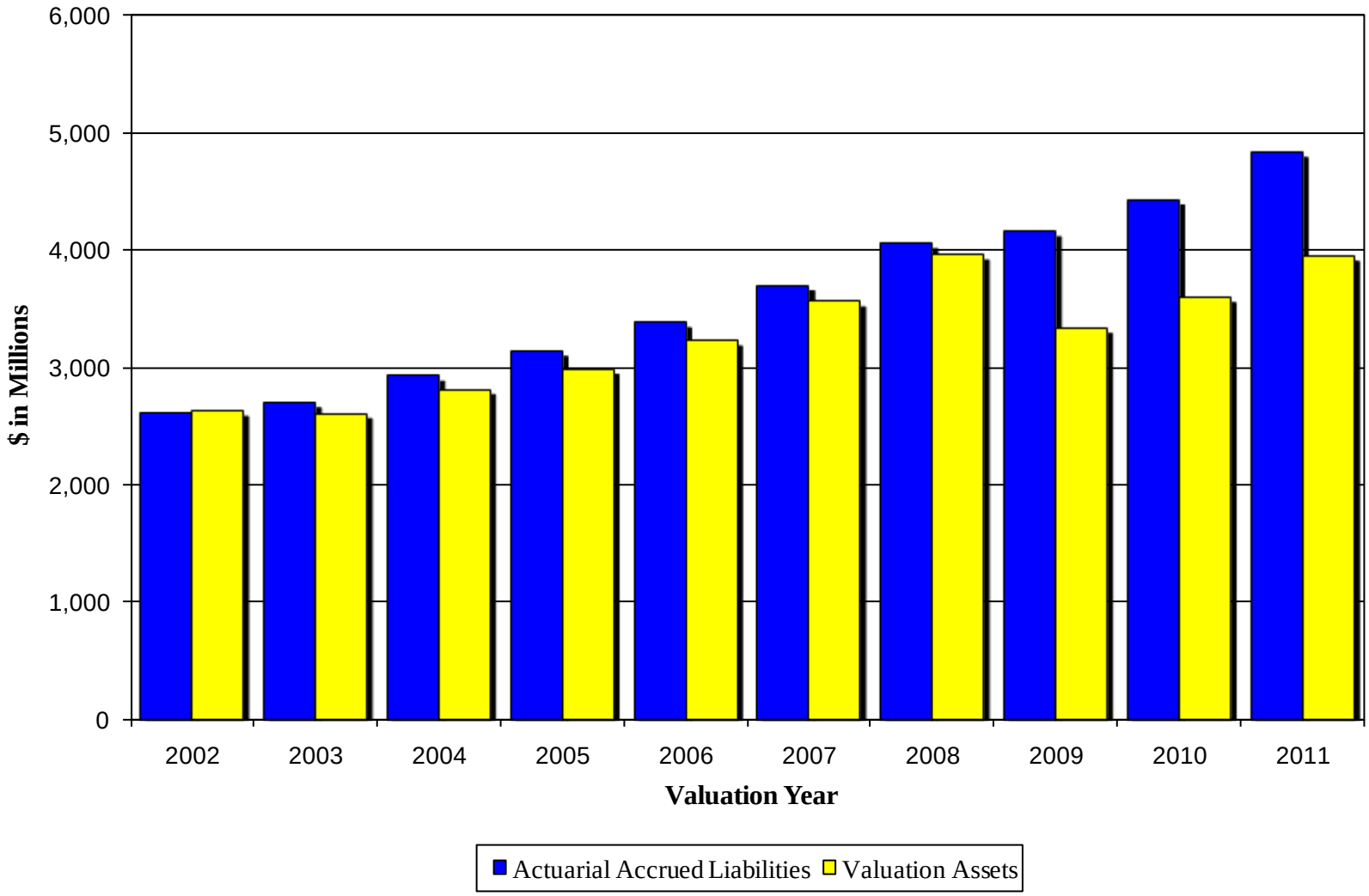
Each employer participating in the System is financially responsible for its own obligation. Accordingly, the aggregate numbers presented on this and the following pages are indicative only of the overall condition of the System and are not indicative of any one employer.

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

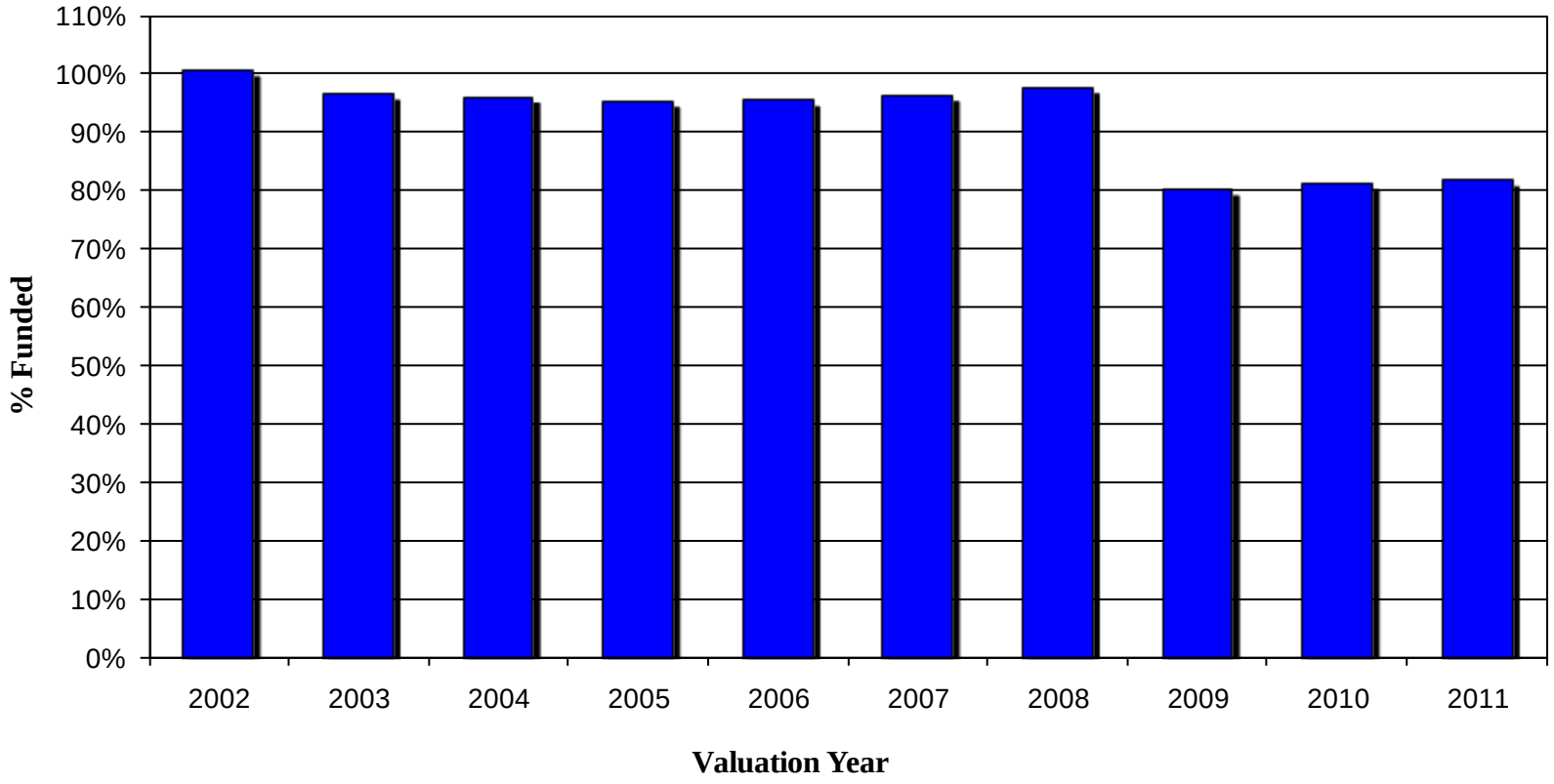
- Employers adopting new benefit programs. For example, before reflecting the benefit changes adopted by political subdivisions during the year, the 2-28-2010 and 2-28-2011 Funded Ratios would have been 81.8% (instead of 81.0%) and 81.6% (instead of 81.6%), respectively.
- New employers joining LAGERS (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

Valuation Date	Entry Age Accrued Liability For			Actuarial Value of Assets	Portion of Accrued Liability Covered by Assets		
	(1) Active Member Contributions	(2) Retirants and Beneficiaries*	(3) Active Members (Employer Financed Portion)		(1)	(2)	(3)
2-28-2002	$ 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
2-28-2011 #	98,127,911	1,737,107,211	3,002,188,189	3,945,085,880	100	100	70

 # Revised actuarial assumptions.
** Includes reserve for future benefit increases.*

EMPLOYERS ACCUMULATION FUND

The Employers Accumulation Fund assets totaled $2,225,518,352 as of February 28, 2011 based on the actuarial value of assets. The individual participating Employers Accumulation Fund accrued liabilities (entry age normal cost method) were computed to be $2,970,498,686 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

Valuation Date	Actuarial Value of Assets	Aggregate Accrued Liabilities	Ratio of Assets to Liabilities*
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
2-28-2011#	2,225,518,352	2,970,498,686	74.9

 # Revised actuarial assumptions.

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

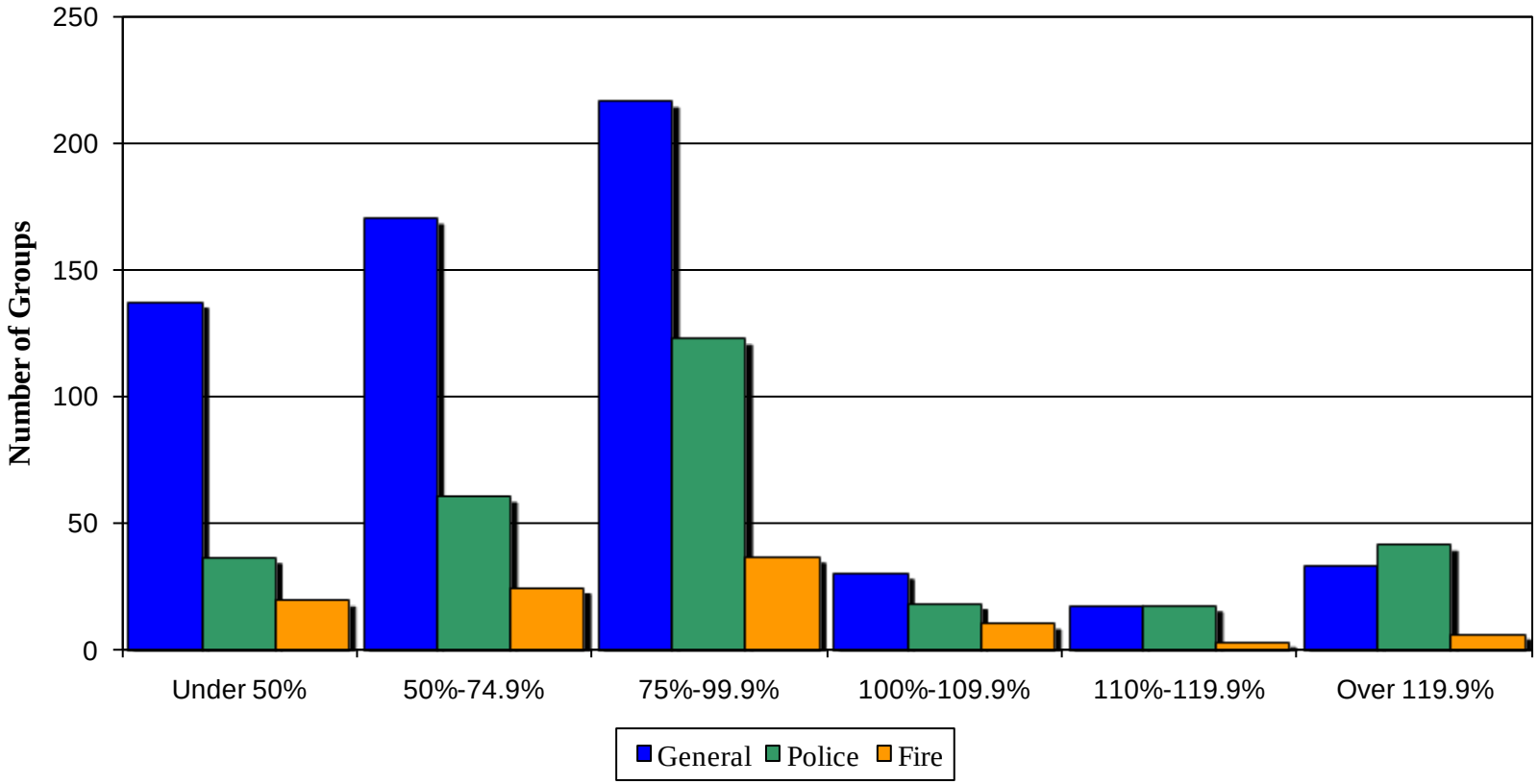
EMPLOYERS ACCUMULATION FUND
PORTION OF LIABILITIES COVERED BY ASSETS
BY VALUATION GROUPS FEBRUARY 28, 2011

Group	Number of Active Members	Number of Valuation Groups with Assets as a Percent of Actuarial Accrued Liabilities						
		Under 50.0% #	50.0% - 74.9%	75.0% - 99.9%	100.0% - 109.9%	110.0% - 119.9%	Over 119.9%	Totals*
General:	1 - 9	92	70	51	7	7	23	250
	10 - 49	38	67	91	13	8	9	226
	50 & up	7	33	74	10	2	1	127
	Totals	137	170	216	30	17	33	603
Police:	1 - 9	23	26	36	10	7	30	132
	10 - 49	12	27	70	7	10	11	137
	50 & up	1	7	16	1	—	—	25
	Totals	36	60	122	18	17	41	294
Fire:	1 - 9	9	12	11		3	5	40
	10 - 49	8	10	22	10		1	51
	50 & up	2	2	3	—	—	—	7
	Totals	19	24	36	10	3	6	98
Totals*		**192**	**254**	**374**	**58**	**37**	**80**	**995**

* *Not included in this tabulation are 30 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



The Members Deposit Fund assets for active members totaled $98,127,911 as of February 28, 2011. The Members Deposit Fund actuarial accrued liabilities are set equal to assets.

Aggregate Actuarial Accrued Liabilities and Actuarial Value of Assets Comparative Statement

Valuation Date	Actuarial Value of Assets	Aggregate Accrued Liabilities	Ratio of Assets to Liabilities
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
2-28-2011	98,127,911	98,127,911	100.0

BENEFIT RESERVE FUND

The Benefit Reserve Fund assets as of February 28, 2011 totaled $1,589,750,114 based on the actuarial value of assets. The present value of future benefits was computed to be $1,737,107,211 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, 2010 and consisted of an overall increase of 4% or less.

Actuarial Accrued Liabilities and Accrued Assets
Comparative Statement

Annual Valuation Date	Pensions Being Paid	Benefit Increase % Last Oct. 1	Investment Return % Last June 30	Present Value of Future Benefits	Reserve for Future Experience	Accrued Liabilities	Actuarial Value of Assets	Ratio of Actuarial Value of Assets to PVFB
2-28-2002	$ 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
2-28-2011 #	150,824,098	4.0	5.4	1,737,107,211	0	1,737,107,211	1,589,750,114	91.5

 # 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 2011.

Benefit Formula	Employer Contribution Rate to the CRF
L-1, LT-4	0.2%
L-3, LT-5, L-7, LT-8	0.2%
L-9, LT-10, L-12, LT-14	0.3%
L-6, L-11	0.3%

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 Date	Employer L-1 Contributions: Year Ended	Actuarial Value of Assets	Accrued Liabilities	Assets Expressed as Percents of Member Payroll	
				Total	Change
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
2-28-2011	0.2	31,689,503	31,689,503	2.3	0.4

 # Reflects a 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, 2011

Statutory Funds	Reported Assets	Actuarial Value of Assets
Employers Accumulation Fund	$1,915,081,487	$2,225,518,352
Members Deposit Fund	98,127,911	98,127,911
Benefit Reserve Fund	1,377,361,041	1,589,750,114
Casualty Reserve Fund	27,455,816	31,689,503
Total	**$3,418,026,255**	**$3,945,085,880**

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, 2011 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

Year Ended June 30	Investment Credits as % of Fund Balance				Inflation Loss % (CPI)
	Casualty Reserve Fund A	Members Deposit Fund B	Benefit Reserve Fund C	Employer Accumulation Fund D	
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
2011	7.5	0.5	9.8	10.2	3.6
5 Year Compound Average			**4.3%**	**4.4%**	**2.2%**

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

Year Ending February 28:	2007	2008	2009	2010
A. Actuarial Value Beginning of Year	$3,224,299,770	$3,557,248,790	$3,957,198,044	$3,330,518,508
B. Market Value End of Year	3,856,385,431	3,989,486,215	2,775,432,090	3,704,012,118
C. Market Value Beginning of Year	3,465,462,225	3,856,385,431	3,989,486,215	2,775,432,090
D. Non-Investment/Administrative Net Cash Flow	8,738,768	6,103,368	(7,132,095)	(11,908,404)
E. Investment Income				
E1. Market Total: B-C-D	382,184,438	126,997,416	(1,206,922,030)	940,488,432
E2. Assumed Rate of Return	7.50%	7.50%	7.50%	7.50%
E3. Amount for Immediate Recognition	242,150,187	267,022,536	296,522,400	249,342,323
E4. Amount for Phased-In Recognition: E1-E3	140,034,251	(140,025,120)	(1,503,444,430)	691,146,109
F. Phased-In Recognition of Investment Income				
F1. Current Year: 0.20 x E4	28,006,850	(28,005,024)	(300,688,886)	138,229,222
F2. First Prior Year	23,790,110	28,006,850	(28,005,024)	(137,718,790)
F3. Second Prior Year	12,707,493	23,790,110	28,006,850	(28,005,024)
F4. Third Prior Year	90,323,919	12,707,493	23,790,110	28,006,850
F5. Fourth Prior Year	(72,768,307)	90,323,921	12,707,495	23,790,110
F6. Total Recognized Phase-Ins	82,060,065	126,823,350	(264,189,455)	24,302,368
G. **Actuarial Value End of Year**				
G1. Preliminary Actuarial Value End of Year: A+D+E3+F6	$3,557,248,790	$3,957,198,044	$3,982,398,894	$3,592,254,795
G2. Upper Corridor Limit: 120% x B	4,627,662,517	4,787,383,458	3,330,518,508	4,444,814,542
G3. Lower Corridor Limit: 80% x B	3,085,108,345	3,191,588,972	2,220,345,672	2,963,209,694
G4. Actuarial Value End of Year	$3,557,248,790	$3,957,198,044	$3,330,518,508	$3,592,254,795
H. Difference Between Market & Actuarial Value	299,136,641	32,288,171	(555,086,418)	111,757,323
I. Ratio of Actuarial Value to Market Value	92.2%	99.2%	120.0%	97.0%
J. Actuarial Value Adjustment Factor (ratio of actuarial value to EAF+MDF+CRF+BRF cost value)	1.1609	1.1810	0.9290	1.1052
K. Recognized Rate of Return	10.04%	11.06%	(15.67)%	8.23%
L. Market Rate of Return	11.01%	3.29%	(30.28)%	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.

DEVELOPMENT OF FUNDING VALUE OF RETIREMENT SYSTEM ASSETS

Year Ending February 28:	2011	2012	2013	2014	2015
A. Actuarial Value Beginning of Year	$3,592,254,795				
B. Market Value End of Year	4,422,956,438				
C. Market Value Beginning of Year	3,704,012,118				
D. Non-Investment/Administrative Net Cash Flow	(8,644,568)				
E. Investment Income					
E1. Market Total: B-C-D	727,588,888				
E2. Assumed Rate of Return	7.50%				
E3. Amount for Immediate Recognition	269,094,938				
E4. Amount for Phased-In Recognition: E1-E3	458,493,950				
F. Phased-In Recognition of Investment Income					
F1. Current Year: 0.20 x E4	91,698,790				
F2. First Prior Year	138,229,222	$ 91,698,790			
F3. Second Prior Year	(137,718,790)	138,229,222	$ 91,698,790		
F4. Third Prior Year	(28,005,024)	(137,718,790)	138,229,222	$ 91,698,790	
F5. Fourth Prior Year	28,006,851	(28,005,024)	(137,718,788)	138,229,221	$ 91,698,791
F6. Total Recognized Phase-Ins	92,211,049	64,204,198	92,209,224	229,928,011	91,698,791
G. **Actuarial Value End of Year**					
G1. Preliminary Actuarial Value End of Year: A+D+E3+F6	$3,944,916,214				
G2. Upper Corridor Limit: 120% x B	5,307,547,726				
G3. Lower Corridor Limit: 80% x B	3,538,365,150				
G4. Actuarial Value End of Year	$3,944,916,214				
H. Difference Between Market & Actuarial Value	478,040,224	413,836,026	321,626,802	91,698,791	
I. Ratio of Actuarial Value to Market Value	89.2%				
J. Actuarial Value Adjustment Factor (ratio of actuarial value to EAF+MDF+CRF+BRF cost value)	1.1542				
K. Recognized Rate of Return	10.07%				
L. Market Rate of Return	19.67%				

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 Fund)

Market Value - February 28, 2011	
Cash & equivalents	$ 101,269,453
Receivables & accruals	(1,275,038)
Stocks	2,504,801,304
Bonds & government securities	1,126,400,039
Timber	194,905,969
Miscellaneous	496,854,711
Total Current Assets	**$ 4,422,956,438**

Revenues and Expenses

Market Value	Year Ended February 28, 2010	Year Ended February 28, 2011
Balance - Beginning of year	$ 2,775,432,090	$ 3,704,012,118
Revenues:		
Employees' contributions	9,162,742	11,734,092
Employer contributions	134,690,075	147,434,323
Investment income	947,000,557	758,057,539
Total	1,090,853,374	917,225,954
Expenditures:		
Benefit payments	154,106,651	166,185,467
Refund of member contributions	1,654,570	1,627,516
Administrative and investment expenses	6,512,125	30,468,651
Total	162,273,346	198,281,634
Balance - End of Year	$ 3,704,012,118	$ 4,422,956,438

SECTION D

GAIN/LOSS ANALYSIS

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, 2010 TO FEBRUARY 28, 2011

Unfunded Accrued Liabilities (UAL), March 1	$840,106,147
Employer Normal Cost	126,774,924
Employer Contributions	147,434,323
Interest	62,233,234
Expected UAL Before Any Changes	881,679,982
Change from Benefit Changes Plus New Employers	15,552,195
Change from Revised Actuarial Assumptions	176,754,735
Expected UAL After All Changes	1,073,986,912
Actual UAL, February 28	892,337,431
Gain/(Loss) for Year From Experience	**$ 181,649,481**

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, 2011

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 2/28/2011
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.	**$ (1,509,098)**
Death-in-Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	**689,290**
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	**40,688,282**
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	**53,837,554**
Investment Income. If there is greater investment return on assets than assumed, there is a gain. If less return, a loss.	**92,211,049**
Retiree, Beneficiary and Deferred Activity. Includes members living longer than expected, COLA increases different than expected, etc.	**18,155,559**
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.	**(22,423,155)**
Gain (or Loss) During Year From Experience	**$ 181,649,481**

INVESTMENT GAIN (LOSS)
FOR THE YEAR ENDED FEBRUARY 28, 2011

Assets, Beginning of Year	$3,592,254,795
Net Cash Flow	(8,644,568)
Assumed Investment Return	269,094,938
Expected Assets End of Year	3,852,705,165
Actual Assets End of Year	3,944,916,214
Gain/(Loss) for Year	**$ 92,211,049**

ACTIVE MEMBER POPULATION RECONCILIATION
MARCH 1, 2010 TO FEBRUARY 28, 2011

	Actual	Expected
Active Members Beginning of Year	32,975	
Plus New Hires	3,485	
Minus Retirements*	779	1,046.5
Minus Deaths	26	42.6
Minus Disabilities	42	#
Minus Other Terminations	2,762	2,042.3
Active Members End of Year	**32,851**	

** Actual retirements include 74 retirees at or above the age where retirements are assumed to occur 100% of the time. Expected retirements include 321 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, 2011
(SECTION REFERENCES ARE TO RSMO)

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

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

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

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

L-1 Benefit Program:	1.00% for life
L-3 Benefit Program:	1.25% for life
L-7 Benefit Program:	1.50% for life
LT-4 Benefit Program:	1.00% for life, plus 1.00% to age 62
LT-5 Benefit Program:	1.25% for life, plus 0.75% to age 62
LT-8 Benefit Program:	1.50% for life, plus 0.50% to age 62
LT-4(65) Benefit Program:	1.00% for life, plus 1.00% to age 65
LT-5(65) Benefit Program:	1.25% for life, plus 0.75% to age 65
LT-8(65) Benefit Program:	1.50% for life, plus 0.50% to age 65
L-9 Benefit Program:	1.60% for life
LT-10(65) Benefit Program:	1.60% for life, 0.40% to age 65
L-12 Benefit Program:	1.75% for life
LT-14(65) Benefit Program:	1.75% for life, 0.25% to age 65
L-6 Benefit Program:	2.00% for life
L-11 Benefit Program:	2.50% for life

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

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

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

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

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

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

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

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

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

(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, 2011

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 2011 actuarial valuations were made, the Benefit Programs evaluated were as follows:

		Benefit Programs																							
		Non-Contributory												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	49	31	2	5	22	46	8	4	2		4	4	49	28	1	1	12	15	4	3				1	291
	Police	22	15	1	2	12	31	4	3			3		26	14			7	8	2					1	151
	Fire	3	3	1	1	5	8	4	–	–		3	1	7	4	–	1	2	2	–	–				–	45
	Totals	74	49	4	8	39	85	16	7	2		10	5	82	46	1	2	21	25	6	3				2	487
3 yr.	General	20	19		5	42	58	21	12	8	2	17	7	27	13	1	2	24	29	3	5	2		2	1	320
	Police	9	8		5	21	25	15	9	4	1	10	5	8	2	1	2	15	13	2	2		1	1	1	160
	Fire	6	2		3	7	5	9	4	2	4	2	2	1	–	–	2	4	3	–	–	–	1	1	–	58
	Totals	35	29		13	70	88	45	25	14	7	29	14	36	15	2	6	43	45	5	7	2	2	4	2	538

The above LT columns include both the LT(62) and LT(65) benefit programs. The table includes 30 groups with no active members.

SECTION F

PARTICIPANT DATA

PARTICIPATING EMPLOYERS EVALUATED FEBRUARY 28, 2011

Type of Group	Number of Participating Employers
General Only	284
Police Only	0
Fire Only	12
General and Police	226
General and Fire	18
General and Police and Fire	68
Total	**608**

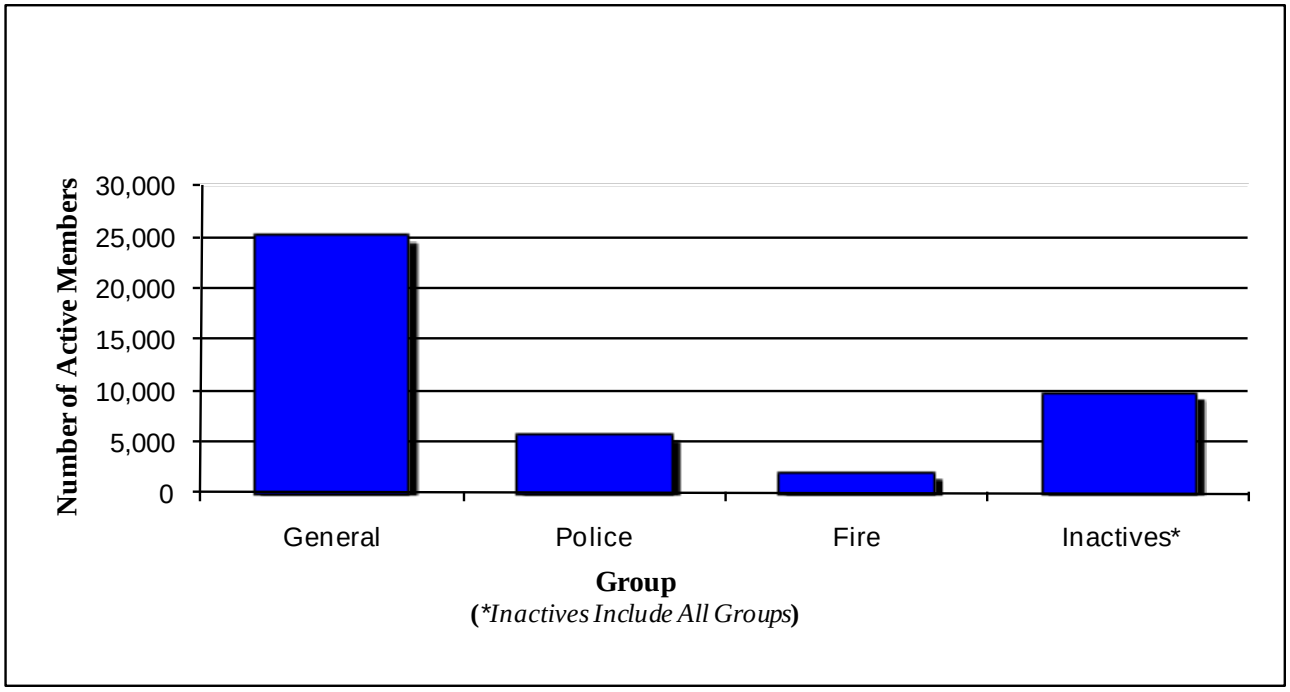
ACTIVE AND INACTIVE MEMBERS IN VALUATIONS FEBRUARY 28, 2011

Classification	Number of Members	Number of Valuation Groups*	Annual Payroll
Active Members			
General	25,094	603	$ 992,867,127
Police	5,753	294	255,711,987
Fire	2,004	98	102,067,446
Total Actives	32,851	995	$1,350,646,560
Inactive Members #	9,782		
Total Members	42,633		

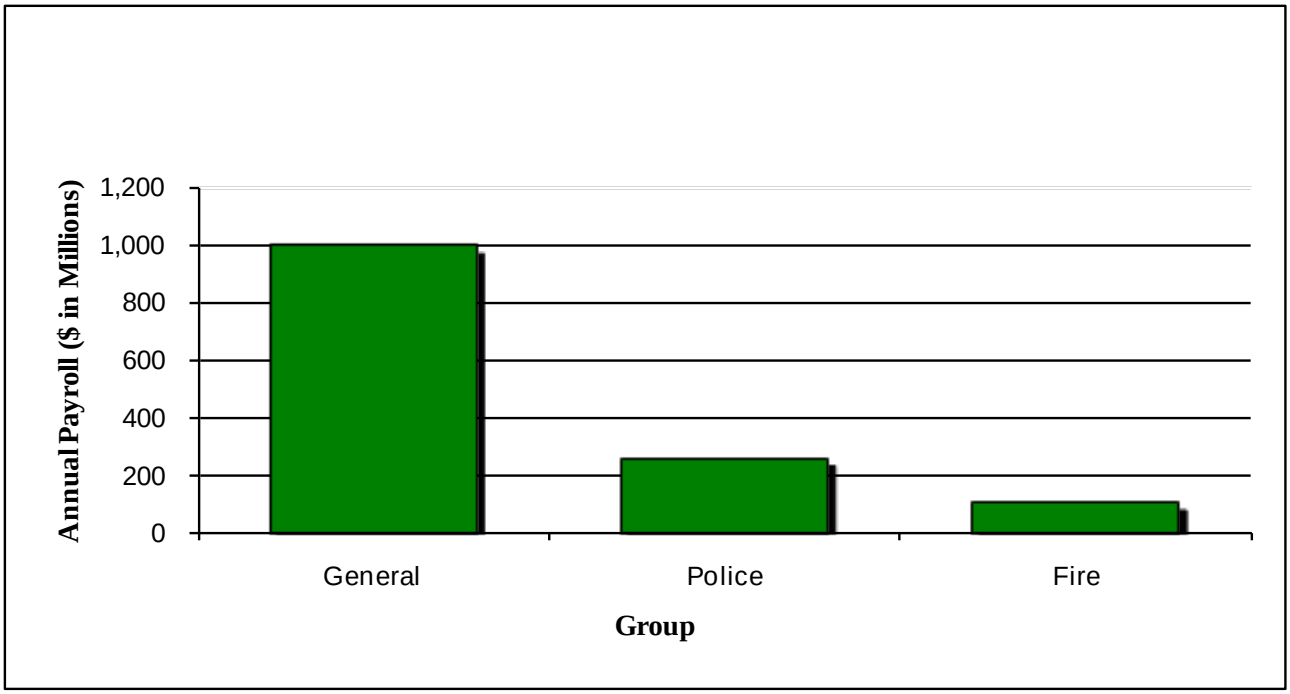
* *Each Police group and each Fire group is evaluated separately. Each General group is evaluated separately, but also may be broken into sub-groups for separate financial experience if the employer desires separate employer rates for internal accounting purposes.*

\# *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 6,631 linked members included in the above total.*

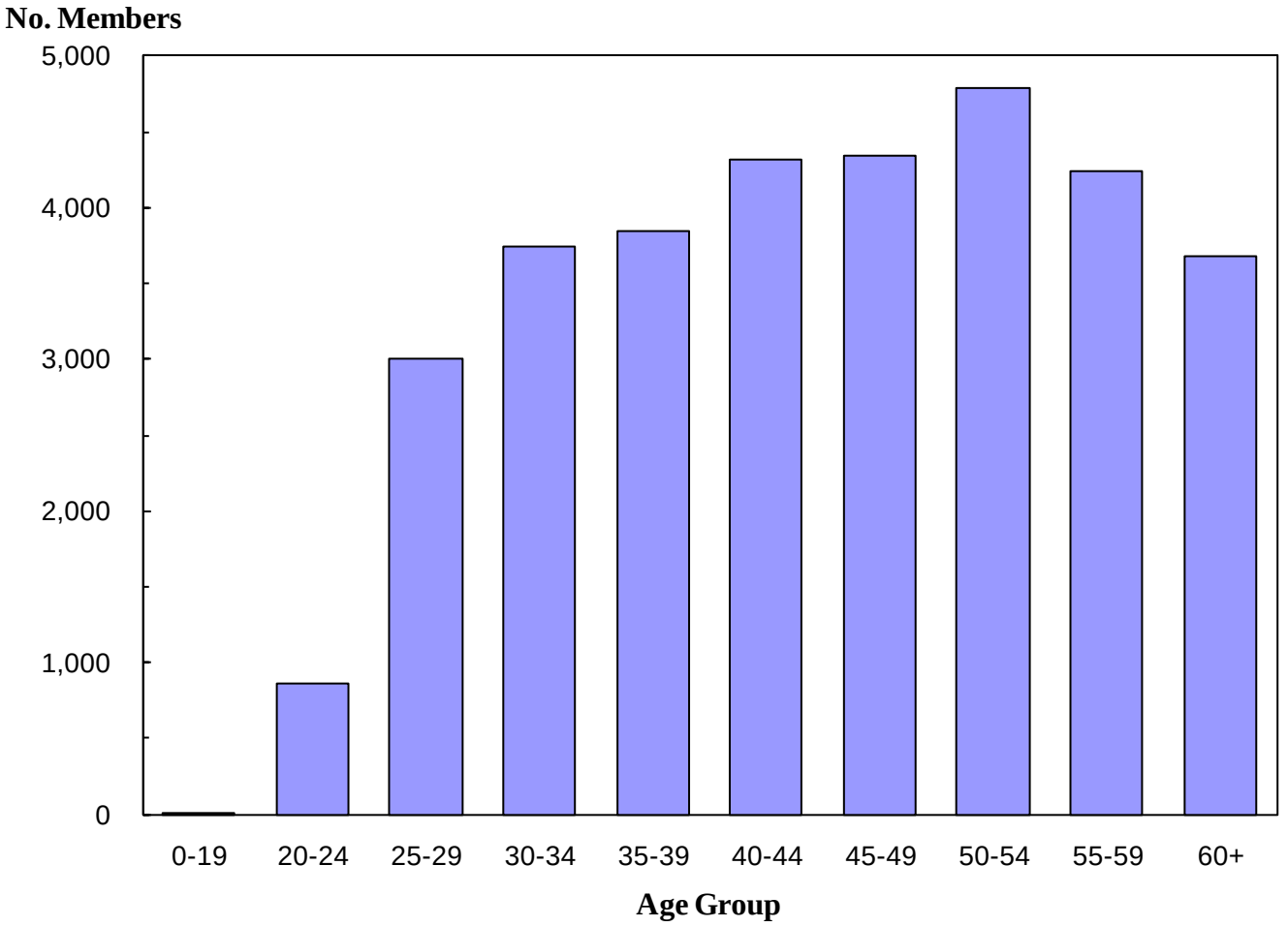
ACTIVE MEMBERS BY GROUP



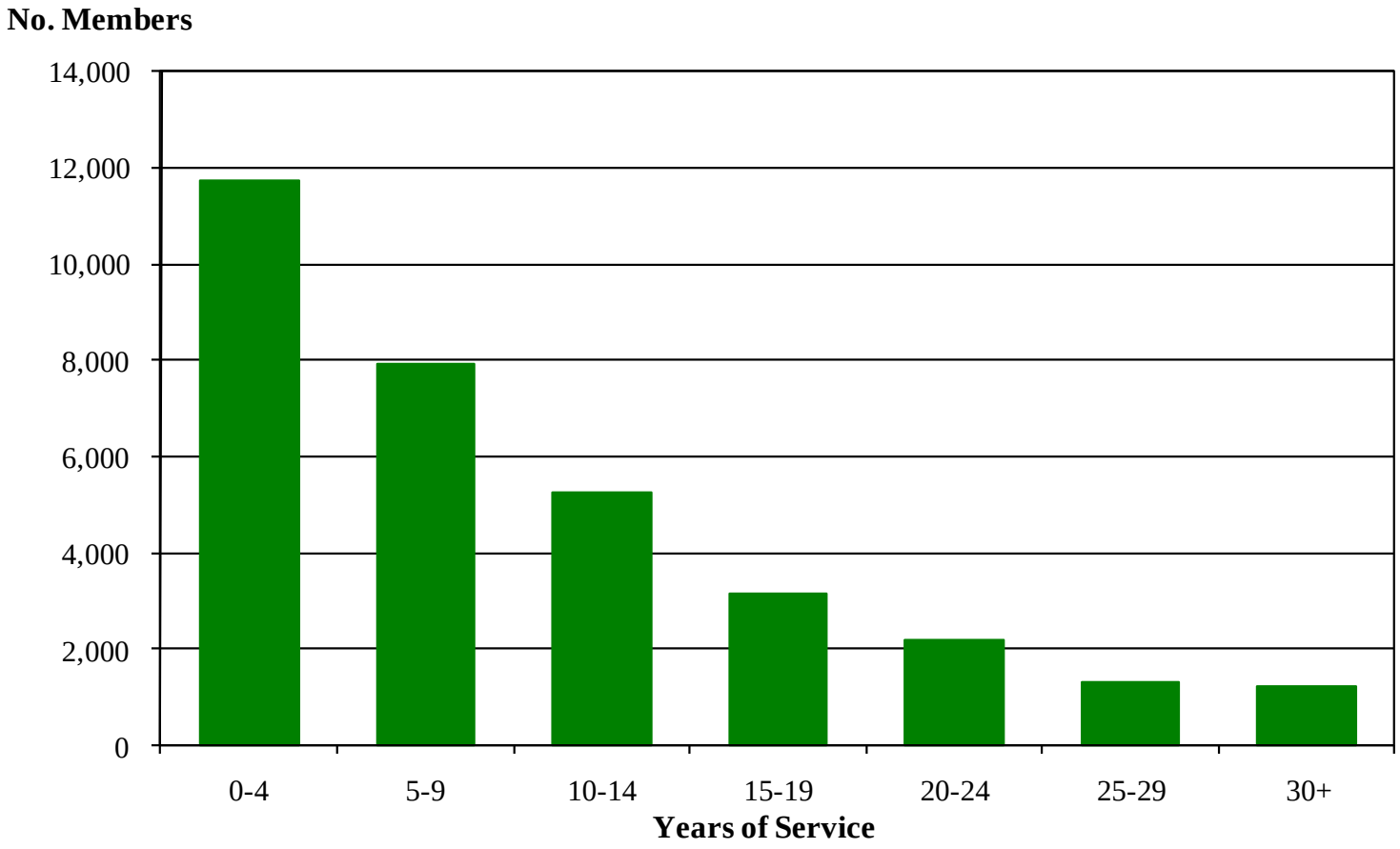
ANNUAL PAYROLL BY GROUP



DISTRIBUTION OF ACTIVE MEMBERS
BY AGE
FEBRUARY 28, 2011



DISTRIBUTION OF ACTIVE MEMBERS
BY SERVICE
FEBRUARY 28, 2011



GENERAL MEMBERS - MEN
ACTIVE AS OF FEBRUARY 28, 2011
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
Under 20	5							5	$ 105,121
20-24	377	7						384	10,414,306
25-29	781	258	9					1,048	34,291,836
30-34	681	511	181	4				1,377	52,282,416
35-39	526	434	308	110	1			1,379	58,283,685
40-44	523	452	346	237	100	3		1,661	73,860,398
45-49	510	449	333	261	252	122	5	1,932	90,633,910
50-54	472	447	385	263	251	231	204	2,253	104,299,461
55-59	359	398	311	244	215	190	294	2,011	93,621,395
60	80	69	44	37	36	24	58	348	15,923,213
61	49	61	44	31	36	24	37	282	13,623,592
62	53	55	37	46	20	17	33	261	11,831,745
63	49	47	32	19	19	18	26	210	10,475,045
64	34	43	31	22	10	8	17	165	8,168,298
65	18	28	13	11	9	8	8	95	3,855,969
66	12	19	14	11	4	8	6	74	3,064,895
67	14	17	15	6	5	3	12	72	3,083,156
68	15	19	9	8	3	2	4	60	2,287,126
69	11	17	7	5	4	0	4	48	1,925,098
70 & Over	28	35	33	16	9	5	7	133	5,017,946
Totals	**4,597**	**3,366**	**2,152**	**1,331**	**974**	**663**	**715**	**13,798**	**$597,048,611**

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

Age: 46.1 years
Service: 10.9 years
Annual Pay: $43,271

GENERAL MEMBERS - WOMEN
ACTIVE AS OF FEBRUARY 28, 2011
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
Under 20	0							0	$ -
20-24	249	0						249	5,934,634
25-29	676	156	4					836	24,700,280
30-34	603	364	90	2				1,059	35,045,653
35-39	528	311	216	62	5			1,122	38,420,301
40-44	521	396	280	138	55	2		1,392	50,581,920
45-49	484	403	301	167	133	48	1	1,537	55,601,345
50-54	477	425	376	244	161	94	71	1,848	68,593,501
55-59	335	365	334	270	168	95	108	1,675	62,575,416
60	64	64	60	52	19	15	18	292	10,636,726
61	53	67	48	34	31	15	21	269	9,480,348
62	41	47	53	33	26	16	13	229	7,948,856
63	38	39	31	21	16	12	12	169	5,594,684
64	35	36	45	24	24	12	19	195	6,950,120
65	8	34	25	18	14	4	7	110	3,829,919
66	11	16	16	11	7	2	2	65	2,137,267
67	3	14	21	9	3	4	4	58	1,939,318
68	7	9	4	6	7	3	1	37	1,178,969
69	5	9	6	4	3	2	1	30	905,786
70 & Over	20	19	31	19	14	8	13	124	3,763,473
Totals	**4,158**	**2,774**	**1,941**	**1,114**	**686**	**332**	**291**	**11,296**	**$395,818,516**

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

Age: 46.6 years
Service: 9.6 years
Annual Pay: $35,041

POLICE MEMBERS
ACTIVE AS OF FEBRUARY 28, 2011
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
Under 20	0							0	$ -
20-24	172	0						172	5,353,669
25-29	711	114	0					825	29,729,670
30-34	549	397	76	0				1,022	39,989,812
35-39	312	329	308	48	0			997	44,130,622
40-44	237	207	232	199	39	0		914	43,419,470
45-49	137	116	92	106	130	37	0	618	30,712,333
50-54	66	77	58	62	96	100	32	491	26,015,393
55-59	63	61	57	56	51	66	64	418	22,082,133
60	15	6	2	7	7	3	15	55	2,566,531
61	4	8	5	7	5	6	6	41	2,227,049
62	6	14	4	4	7	9	10	54	2,709,627
63	5	5	3	8	5	3	7	36	1,716,617
64	6	9	6	8	1	0	2	32	1,477,983
65	6	6	1	2	8	2	1	26	1,268,060
66	3	3	5	1	1	0	2	15	678,266
67	3	1	2	2	1	0	1	10	393,518
68	1	3	1	2	2	0	1	10	500,542
69	0	0	3	0	1	0	0	4	270,953
70 & Over	2	2	5	2	1	0	1	13	469,739
Totals	**2,298**	**1,358**	**860**	**514**	**355**	**226**	**142**	**5,753**	**$255,711,987**

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: 9.3 years
Annual Pay: $44,448

FIRE MEMBERS
ACTIVE AS OF FEBRUARY 28, 2011
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	56	0						56	$ 1,924,549
25-29	248	42	0					290	11,343,794
30-34	160	103	27	0				290	12,586,149
35-39	109	123	98	22	1			353	17,479,114
40-44	58	101	107	64	25	0		355	18,785,642
45-49	20	35	41	66	72	19	1	254	15,025,996
50-54	16	17	18	20	46	63	21	201	12,258,276
55-59	11	5	15	15	23	29	43	141	8,927,657
60	1	1	0	3	3	2	6	16	964,613
61	0	1	0	1	3	1	5	11	721,817
62	1	4	1	2	1	2	4	15	745,896
63	1	0	1	2	0	1	1	6	377,932
64	1	2	0	0	0	1	5	9	546,237
65	1	0	0	0	0	0	0	1	34,781
66	0	0	0	0	0	0	0	0	0
67	0	0	0	1	0	1	0	2	113,715
68	0	0	0	0	1	0	1	2	100,610
69	0	0	0	0	0	0	0	0	0
70 & Over	0	0	1	0	0	1	0	2	130,668
Totals	**683**	**434**	**309**	**196**	**175**	**120**	**87**	**2,004**	**$102,067,446**

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: $50,932

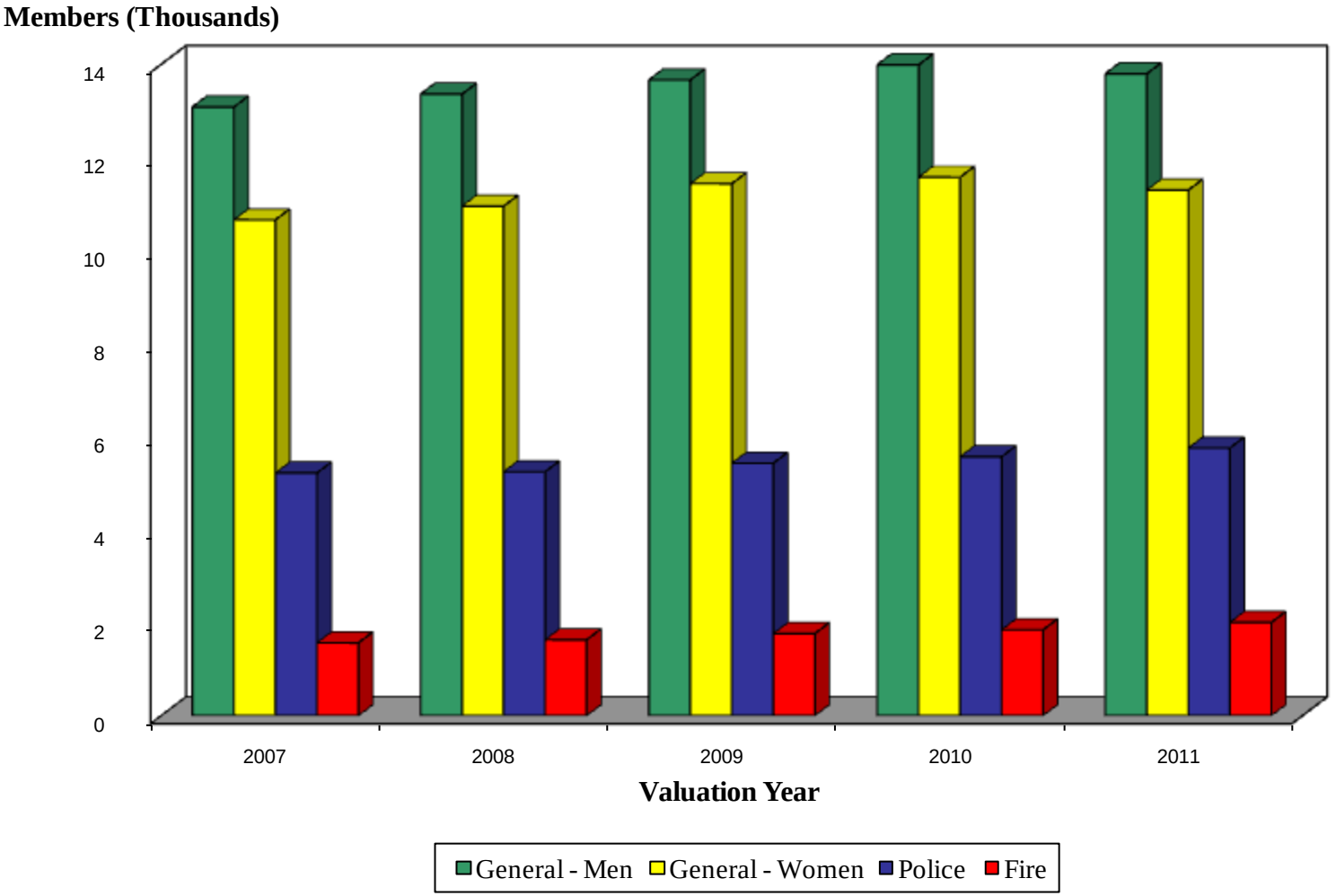
PARTICIPATING EMPLOYERS AND MEMBERS IN VALUATIONS
10 YEAR COMPARATIVE STATEMENT

Valuation Date	Number of		Active Members				Inflation Increase % (C.P.I.)
	Participating Employers	Valuation Groups	Number	Annual Payroll	Average Pay	% Increase	
2-28-2002	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
2-28-2011	608	995	32,851	1,350,646,560	41,114	1.8	2.1
10 Year Compound Average						**3.0%**	**2.3%**

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

Group	Valuation at 2-28	No. of Members	Group Averages (In Years) Age	Service	Annual Payroll Average	Change	Inflation Increase % (C.P.I)
General - Men	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
	2011	13,798	46.1	10.9	43,271	+2.1	+2.1
General - Women	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
	2011	11,296	46.6	9.6	35,041	+1.5	+2.1
Police	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
	2011	5,753	40.2	9.3	44,448	+0.4	+2.1
Fire	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
	2011	2,004	40.3	11.1	50,932	+2.0	+2.1

ACTIVE MEMBERS BY GROUP
2007-2011



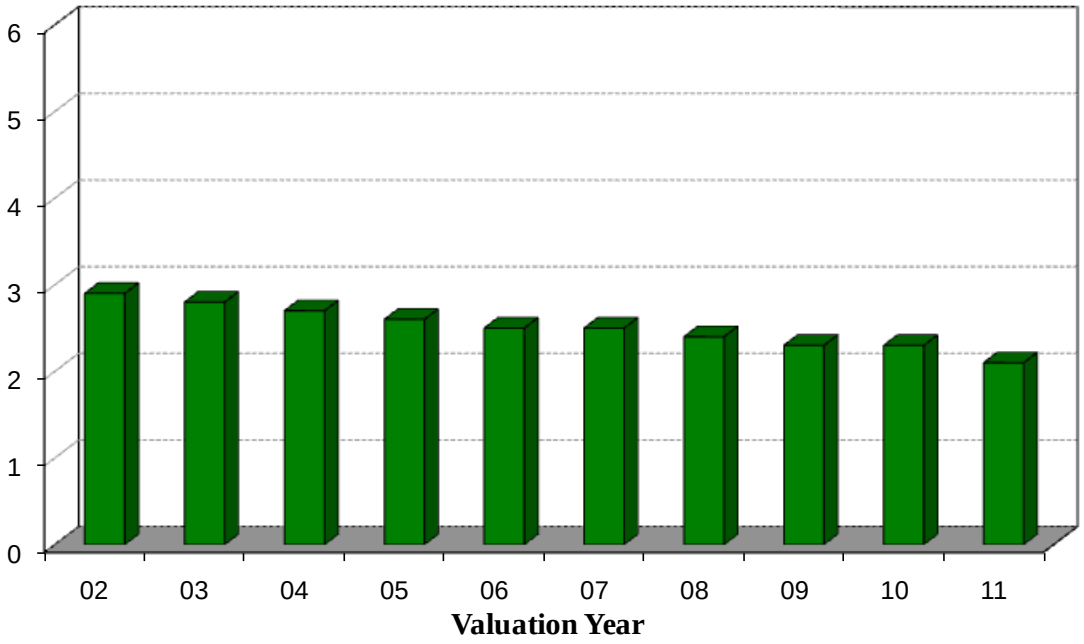
RETIRANTS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS
10 YEAR COMPARATIVE STATEMENT

Year Ended	Added to Rolls		Removed from Rolls		Rolls End of Year		% Incr. in Annual Allowances	Average Annual Allowances	Retired Lives in Relation to Active Members	
	No.	Annual Allowances*	No.	Annual Allowances	No.	Annual Allowances			Active Members Per Benefit Recipient	Allowances as Percents of Active Payroll
2-28-2002	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
2-28-2011	1,399	16,372,009	529	4,939,905	15,492	150,824,098	8.2	9,736	2.1	11.2

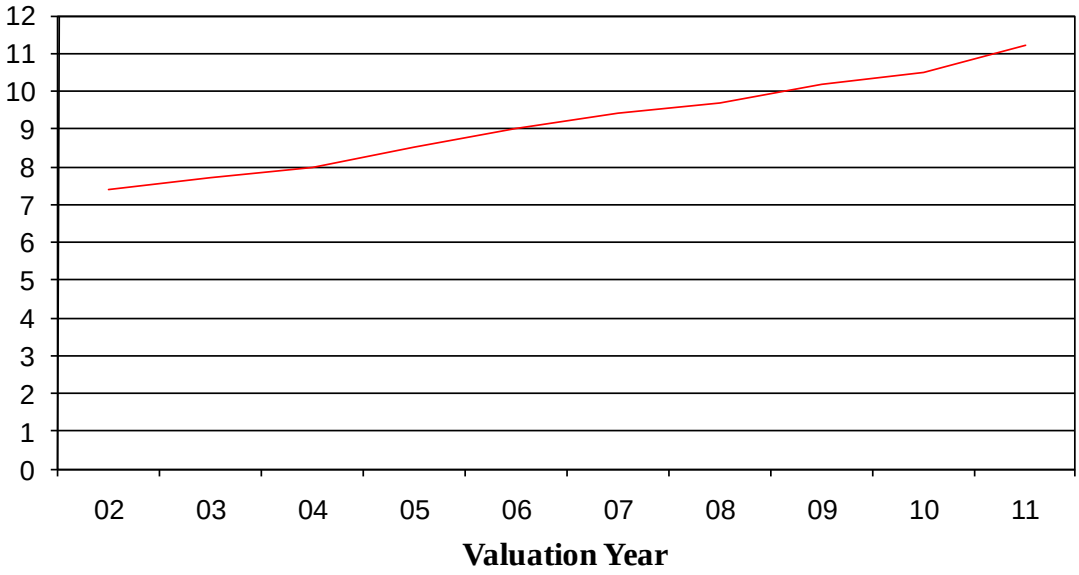
* *Includes post-retirement adjustments.*

RETIRANTS AND BENEFICIARIES
COMPARATIVE DATA

Active Members Per Benefit Recipient



Allowances as % of Active Pay



RETIRANTS AND BENEFICIARIES ON ROLLS FEBRUARY 28, 2011
BY DISBURSING FUND AND TYPE OF BENEFIT BEING PAID

Type of Benefit	Number	Annual Allowances
Service Early & Deferred		
Life Option	6,898	$ 66,462,112
Option A	2,430	26,705,062
Option B	1,569	22,857,726
Option C	1,522	11,912,900
Beneficiary Receiving	1,142	6,728,309
Totals	13,561	134,666,109
Duty Disability		
Life Option	298	4,414,698
Option A	112	1,416,066
Option B	53	801,914
Option C	40	534,669
Totals	503	7,167,347
Non-Duty Disability		
Life Option	278	2,163,065
Option A	132	1,187,567
Option B	59	570,731
Option C	81	532,680
Totals	550	4,454,043
Beneficiary Receiving	213	1,091,434
Total Disability	1,266	12,712,824
Death-In-Service		
Spouse Receiving	617	3,317,639
Children Receiving	48	127,526
Totals	665	3,445,165
Totals	**15,492**	**$150,824,098**

SECTION G

COMPUTED EMPLOYER CONTRIBUTIONS: SUMMARY OF COMPUTED INDIVIDUAL RATES

COMPUTED EMPLOYER CONTRIBUTIONS: NON-CONTRIBUTORY PLANS BY VALUATION GROUPS AS OF FEBRUARY 28, 2011

Group	Number of Valuation Groups				
	Under 2.00%	2.00-4.99%	5.00-7.99%	Over 8.00%	Totals
Benefit Program L-1					
General	9	14	29	15	67
Police	8	8	10	3	29
Fire	1	0	5	3	9
Total	18	22	44	21	105
Benefit Program L-3					
General	8	5	13	24	50
Police	6	1	2	13	22
Fire	0	1	0	4	5
Total	14	7	15	41	77
Benefit Program LT-4(62)					
General	0	0	0	0	0
Police	0	0	0	0	0
Fire	0	0	0	0	0
Total	0	0	0	0	0
Benefit Program LT-4(65)					
General	0	0	1	1	2
Police	0	0	0	1	1
Fire	0	0	0	1	1
Total	0	0	1	3	4
Benefit Program LT-5(62)					
General	0	1	2	1	4
Police	0	0	2	1	3
Fire	0	0	1	0	1
Total	0	1	5	2	8
Benefit Program LT-5(65)					
General	0	0	5	1	6
Police	1	2	1	0	4
Fire	1	0	1	1	3
Total	2	2	7	2	13
Benefit Program L-6					
General	2	1	0	61	64
Police	3	0	1	29	33
Fire	0	0	0	9	9
Total	5	1	1	99	106
Benefit Program L-7					
General	4	6	31	61	102
Police	6	8	12	28	54
Fire	1	3	5	4	13
Total	11	17	48	93	169

COMPUTED EMPLOYER CONTRIBUTIONS: NON-CONTRIBUTORY PLANS BY VALUATION GROUPS AS OF FEBRUARY 28, 2011 (CONTINUED)

Group	Number of Valuation Groups				
	Under 2.00%	2.00-4.99%	5.00-7.99%	Over 8.00%	Totals
Benefit Program LT-8(62)					
General	0	1	1	2	4
Police	0	0	1	1	2
Fire	0	0	1	2	3
Total	0	1	3	5	9
Benefit Program LT-8(65)					
General	0	0	7	17	24
Police	1	1	3	11	16
Fire	1	1	0	8	10
Total	2	2	10	36	50
Benefit Program L-9					
General	1	0	3	12	16
Police	1	2	3	6	12
Fire	2	0	0	2	4
Total	4	2	6	20	32
Benefit Program LT-10(65)					
General	1	0	0	9	10
Police	0	1	0	3	4
Fire	0	0	0	2	2
Total	1	1	0	14	16
Benefit Program L-11					
General	0	0	0	1	1
Police	0	0	0	1	1
Fire	0	0	0	4	4
Total	0	0	0	6	6
Benefit Program L-12					
General	1	2	1	17	21
Police	1	2	2	8	13
Fire	1	0	0	4	5
Total	3	4	3	29	39
Benefit Program LT-14(65)					
General	0	0	1	10	11
Police	1	0	1	3	5
Fire	0	0	0	3	3
Total	1	0	2	16	19
Totals*	**61**	**60**	**145**	**387**	**653**

** There are fifteen 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, 2011

Group	Number of Valuation Groups				
	Under 2.00%	2.00-4.99%	5.00-7.99%	Over 8.00%	Totals
Benefit Program L-1					
General	5	27	25	18	75
Police	4	13	10	3	30
Fire	0	1	5	2	8
Total	9	41	40	23	113
Benefit Program L-3					
General	3	9	13	16	41
Police	2	6	6	1	15
Fire	0	0	2	2	4
Total	5	15	21	19	60
Benefit Program LT-4(62)					
General	0	0	0	0	0
Police	0	0	0	0	0
Fire	0	0	0	0	0
Total	0	0	0	0	0
Benefit Program LT-4(65)					
General	0	0	0	2	2
Police	0	0	0	0	0
Fire	0	0	0	0	0
Total	0	0	0	2	2
Benefit Program LT-5(62)					
General	0	0	0	0	0
Police	0	0	0	0	0
Fire	0	0	0	0	0
Total	0	0	0	0	0
Benefit Program LT-5(65)					
General	0	0	2	1	3
Police	0	0	1	1	2
Fire	0	0	1	2	3
Total	0	0	4	4	8
Benefit Program L-6					
General	1	0	2	32	35
Police	2	3	2	13	20
Fire	1	0	0	4	5
Total	4	3	4	49	60
Benefit Program L-7					
General	3	3	17	21	44
Police	2	4	9	5	20
Fire	0	0	1	3	4
Total	5	7	27	29	68

COMPUTED EMPLOYER CONTRIBUTIONS: CONTRIBUTORY PLANS BY VALUATION GROUPS AS OF FEBRUARY 28, 2011 (CONTINUED)

Group	Number of Valuation Groups				
	Under 2.00%	2.00-4.99%	5.00-7.99%	Over 8.00%	Totals
Benefit Program LT-8(62)					
General	0	0	0	1	1
Police	0	0	0	0	0
Fire	0	0	0	0	0
Total	0	0	0	1	1
Benefit Program LT-8(65)					
General	0	1	3	2	6
Police	1	1	1	0	3
Fire	0	0	0	0	0
Total	1	2	4	2	9
Benefit Program L-9					
General	1	3	2	2	8
Police	0	0	1	0	1
Fire	0	0	0	0	0
Total	1	3	3	2	9
Benefit Program LT-10(65)					
General	0	0	0	2	2
Police	0	0	0	0	0
Fire	0	0	0	0	0
Total	0	0	0	2	2
Benefit Program L-11					
General	0	0	0	0	0
Police	0	0	0	1	1
Fire	0	0	0	1	1
Total	0	0	0	2	2
Benefit Program L-12					
General	0	0	0	2	2
Police	0	0	0	1	1
Fire	0	0	0	1	1
Total	0	0	0	4	4
Benefit Program LT-14(65)					
General	0	0	0	2	2
Police	0	1	0	1	2
Fire	0	0	0	0	0
Total	0	1	0	3	4
Totals*	**25**	**72**	**103**	**142**	**342**

** There are fifteen 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 7.25% 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 3.5%, the 7.25% investment return rate translates to an assumed real rate of return of 3.75%. No specific price inflation assumption is required to perform the valuations. However, a price inflation assumption of 3.0% would be consistent with the other economic assumptions. Adopted 2011.

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 3.5% recognizes wage inflation. Adopted 2011.

The active member payroll is assumed to increase 3.5% annually, which is the portion of the individual pay increase assumptions attributable to wage inflation. Adopted 2011.

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 105% of the 1994 Group Annuity Mortality (GAM) Table set back 0 years for men and 0 years for women. The disability post-retirement rates were equal to the standard rates set forward 10 years. The mortality table was established based upon the experience of the Missouri LAGERS membership in total. Based upon the experience observed during the most recent 5-year period study, it appears that the current table provides for an approximate 13% margin for future mortality improvement. Related values are shown on page H-3. Adopted 2011.

The probabilities of age and service retirement are shown on page H-3. Adopted 2011.

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 75% of the RP-2000 Combined Healthy Table. It was assumed that 50% of pre-retirement deaths would be duty related. Adopted 2011.

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
(105% OF THE 1994 GROUP ANNUITY MORTALITY TABLE, SETBACK 0 YEARS FOR MEN AND 0 YEARS FOR WOMEN, & I = 7.25%)

Sample Attained Ages	Present Value of $1.00 Monthly Increasing for Life		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	$194.91	$209.21	30.23	34.45
55	177.75	193.85	25.71	29.74
60	158.69	176.17	21.40	25.17
65	138.66	156.97	17.45	20.88
70	118.64	136.72	13.94	16.94
75	98.66	115.04	10.81	13.27
80	79.86	93.60	8.10	10.02

PERCENT OF ELIGIBLE ACTIVE MEMBERS RETIRING WITHIN THE NEXT YEAR

	Without Rule of 80 Eligibility				With Rule of 80 Eligibility			
	General*				General			
Ages	Men	Women	Police*	Fire*	Men	Women	Police	Fire
50			3.0%	2.5%	15.0%	15.0%	25.0%	25.0%
51			3.0	2.5	15.0	15.0	25.0	15.0
52			3.0	2.5	15.0	15.0	15.0	15.0
53			3.0	2.5	15.0	15.0	15.0	15.0
54			3.0	2.5	15.0	15.0	15.0	15.0
55	2.5%	3.0%	10.0	15.0	15.0	15.0	15.0	15.0
56	2.5	3.0	10.0	15.0	15.0	15.0	15.0	15.0
57	2.5	3.0	10.0	10.0	15.0	15.0	15.0	15.0
58	2.5	3.0	10.0	15.0	15.0	15.0	15.0	15.0
59	2.5	3.0	10.0	15.0	15.0	15.0	15.0	20.0
60	10.0	10.0	10.0	20.0	15.0	15.0	15.0	30.0
61	10.0	10.0	10.0	10.0	15.0	15.0	25.0	30.0
62	25.0	15.0	25.0	30.0	30.0	15.0	30.0	45.0
63	25.0	15.0	20.0	30.0	30.0	15.0	30.0	45.0
64	20.0	15.0	20.0	25.0	30.0	20.0	30.0	45.0
65	25.0	20.0	100.0	100.0	30.0	25.0	100.0	100.0
66	25.0	25.0			30.0	25.0		
67	20.0	20.0			30.0	25.0		
68	20.0	20.0			30.0	25.0		
69	20.0	15.0			30.0	25.0		
70	100.0	100.0			100.0	100.0		

* *First 5 years of retirement pattern only apply to early retirement. Early retirement rates are also applicable if Rule of 80 is adopted.*

GENERAL - MEN
SEPARATIONS FROM ACTIVE EMPLOYMENT
BEFORE AGE & SERVICE RETIREMENT
& INDIVIDUAL PAY INCREASE ASSUMPTIONS

Sample Ages	Years of Service	Percent of Active Members Separating within the Next Year		Pay Increase Assumptions for an Individual Employee		
		Death	Other	Merit & Seniority	Base (Economy)	Increase Next Year
ALL	0		18.00%			
	1		16.00			
	2		14.00			
	3		11.00			
	4		9.00			
25	5 & Over	0.03%	7.50	3.3%	3.5%	6.8%
30		0.03	6.50	2.5	3.5	6.0
35		0.06	5.10	2.0	3.5	5.5
40		0.08	3.80	1.5	3.5	5.0
45		0.11	3.00	1.0	3.5	4.5
50		0.16	2.40	0.6	3.5	4.1
55		0.27	1.80	0.4	3.5	3.9
60		0.51	1.00	0.3	3.5	3.8
65		0.96	0.00	0.0	3.5	3.5

GENERAL - WOMEN
SEPARATIONS FROM ACTIVE EMPLOYMENT
BEFORE AGE & SERVICE RETIREMENT
& INDIVIDUAL PAY INCREASE ASSUMPTIONS

Sample Ages	Years of Service	Percent of Active Members Separating within the Next Year		Pay Increase Assumptions for an Individual Employee		
		Death	Other	Merit & Seniority	Base (Economy)	Increase Next Year
ALL	0		21.00%			
	1		20.00			
	2		16.00			
	3		13.00			
	4		12.00			
25	5 & Over	0.02%	10.70	3.3%	3.5%	6.8%
30		0.02	9.40	2.5	3.5	6.0
35		0.04	7.20	2.0	3.5	5.5
40		0.05	5.50	1.5	3.5	5.0
45		0.08	4.20	1.0	3.5	4.5
50		0.13	3.40	0.6	3.5	4.1
55		0.20	2.50	0.4	3.5	3.9
60		0.38	1.20	0.3	3.5	3.8
65		0.73	0.00	0.0	3.5	3.5

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

Sample Ages	Years of Service	Percent of Active Members Separating within the Next Year		Pay Increase Assumptions for an Individual Employee		
		Death	Other	Merit & Seniority	Base (Economy)	Increase Next Year
ALL	0		18.00%			
	1		17.00			
	2		16.00			
	3		13.00			
	4		12.00			
25	5 & Over	0.03%	10.10	3.3%	3.5%	6.8%
30		0.03	8.00	2.5	3.5	6.0
35		0.06	6.10	2.0	3.5	5.5
40		0.08	4.70	1.5	3.5	5.0
45		0.11	3.60	1.0	3.5	4.5
50		0.16	1.80	0.6	3.5	4.1
55		0.27	1.00	0.4	3.5	3.9

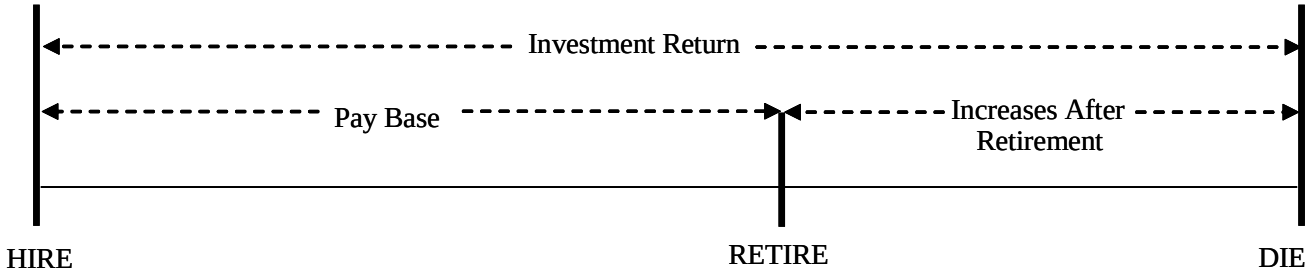
FIRE
SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE AGE & SERVICE RETIREMENT & INDIVIDUAL PAY INCREASE ASSUMPTIONS

Sample Ages	Years of Service	Percent of Active Members Separating within the Next Year		Pay Increase Assumptions for an Individual Employee		
		Death	Other	Merit & Seniority	Base (Economy)	Increase Next Year
ALL	0		8.00%			
	1		7.00			
	2		6.00			
	3		6.00			
	4		5.00			
25	5 & Over	0.03%	5.00	5.1%	3.5%	8.6%
30		0.03	4.00	3.2	3.5	6.7
35		0.06	2.80	1.9	3.5	5.4
40		0.08	2.20	1.2	3.5	4.7
45		0.11	1.80	0.9	3.5	4.4
50		0.16	1.00	0.6	3.5	4.1
55		0.27	0.50	0.4	3.5	3.9

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.

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 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.

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

No. Years Ended December	Inflation (CPI)	Cash Equiv. (T Bills)	Bonds (Long Term) US Treasury	Bonds (Long Term) Corporate (Sol. Bro.)	Stocks (S & P 500)	Real Return for Sample Fund A	Real Return for Sample Fund B	Real Return for Sample Fund C
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
1/2010	1.5	(1.4)	8.5	10.7	13.4	9.7	10.4	11.0
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
5/2010	2.2	0.0	3.3	3.6	0.1	3.1	2.6	2.0
30/2010	**3.2**	**1.8**	**6.8**	**6.8**	**7.3**	**6.9**	**7.0**	**7.1**

Sample Funds (only three of many reasonable samples)

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

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

Changes in Economic Assumptions within an Economic Environment of Inflation

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

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

LAGERS RETAINER ACTUARIAL FEES
10 YEAR COMPARATIVE STATEMENT

Valuation Date As of	Number of Valuation Groups	Annual Actuarial Fees (nearest $1)	Consumer Price Index (1967 is 100)	Average Fee per Group	
				Unadjusted Dollars	1967* Dollars
2-28-2002	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
2-28-2011	995	262,962	662.943	264	40

* *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.*

GRS
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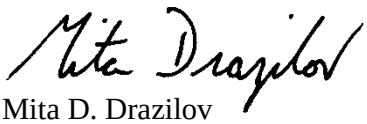
August 29, 2011

Mr. Keith Hughes
Executive Secretary
Missouri Local Government
Employees Retirement System
701 West Main Street
Jefferson City, Missouri 65101

Dear Keith:

Please find enclosed 15 copies of the ***Compiled Report of the February 28, 2011 annual actuarial valuations*** for the participating employers of the Missouri Local Government Employees Retirement System.

Sincerely,



Mita D. Drazilov

MDD:JAK:rmg
Enclosures

cc: Mr. Nathan Alexander, (Williams-Keepers, LLC)