Rules of **Retirement Systems**

Division 20—Missouri Local Government Employees' Retirement System (LAGERS) Chapter 4—Acturial Assumptions

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Title 16—RETIREMENT SYSTEMS
Division 20—Missouri Local
Government Employees' Retirement
System (LAGERS)
Chapter 4—Actuarial Assumptions

16 CSR 20-4.010 Actuarial Assumptions

PURPOSE: This rule complies with the provisions of section 70.605.14., RSMo (1986) regarding the adoption of mortality and other tables of experience relative to employees.

- (1) The investment return rate used in making the valuations is seven percent (7%) per year, compounded annually, before retirement and four percent (4%) per year, compounded annually, after retirement. This rate of return is not the assumed real rate of return. The real rate of return is the rate of investment return in excess of the inflation rate. Considering other financial assumptions, the seven percent (7%) investment return rate translates to an assumed real rate of return of three percent (3%). Adopted 1986.
- (2) The mortality table used in evaluating allowances to be paid is the 1984 Group Annuity Mortality Table set back no years for men and six (6) years for women. Adopted 1990.
- (3) The probabilities of retirement with an age and service allowance are shown in Table 1. Adopted 1996.
- (4) The probabilities of withdrawal from service together with individual pay increase assumptions are shown in Table 2. Adopted 1996.
- (5) Total active member payroll is assumed to increase four percent (4%) per year, which is the portion of the individual pay increase assumptions attributable to inflation. In effect, this assumes no change in the number of active members per employer. Adopted 1986.
- (6) An individual entry-age actuarial cost method of valuation is used in determining age and service allowance actuarial liabilities and normal cost. Adopted 1986.
- (7) The actuarial valuation computations are made by or under the supervision of a Member of the American Academy of Actuaries (MAAA).



TABLE 1

Percent of Eligible Active Members Retiring Within Next Year
Without Rule of 80 Eligibility

Retirement	General Members		Retirement		
Ages	Men	Women	Ages	Police	Fire
60	30%	30%	55	35%	35%
61	20	15	56	15	20
62	35	20	57	10	12
63	30	15	58	15	10
64	30	25	59	15	20
65	45%	40%	60	15%	20%
66	35	30	61	20	20
67	30	20	62	40	45
68	20	25	63	35	40
69	30	30	64	40	35
70	100	100	65	100	100

Percent of Eligible Active Members Retiring Within Next Year With Rule of 80 Eligibility

Retirement				
Ages	Men	Women	Police	Fire
50	15%	15%	25%	20%
51	15	15	25	20
52	15	15	25 25	20
52 53	15	15	25	20
54	15	15	25	20
55	15	15	25	20
56	15	15	25	20
57	15	15 15		10
58	15	15 15 25 20		15
59	15			10
60	25	30	20	20
61	25	20	25	15
62	35	25	30	45
63	25	20 25		35
64	40	35 50		70
65	55	50	100	100
66	45	35		
67	35	30		
68	25	25		
69	35	50		
70	100	100		

TABLE 2
Withdrawal From Active Employment Before Age and Service Retirement and Individual
Pay Increase Assumptions

Percent of Active Members Separating Within Next Year

Sample Ages All	Years of Service 0 1 2 3 4	General 1 <u>Men</u> 25.00% 17.00 14.00 12.00 10.00	Members <u>Women</u> 26.00% 22.00 17.00 16.00 12.00	Police 25.00% 21.00 18.00 16.00 14.00	Fire 19.00% 12.00 9.00 7.00 6.00	Percent Increase in Individual's Pay <u>During Next Year</u>
25	5 & over	7.76%	11.35%	11.56%	5.46%	8.0%
30		6.67	10.05	9.57	4.47	6.4
35		5.50	8.77	7.80	3.50	5.7
40		4.75	7.50	6.65	2.55	5.4
45		4.17	6.14	5.97	1.97	5.2
50		3.89%	5.24%	4.29%	1.49%	5.0%
55		3.28	3.74	1.88	0.98	4.8
60		2.51	2.32	1.21	1.21	4.5
65		1.95	1.10	1.95	1.95	4.0

AUTHORITY: section 70.605.14, RSMo 1994.* Original rule filed Dec. 29, 1975, effective Jan. 8, 1976. Amended: Filed July 1, 1977, effective Oct. 13, 1977. Amended: Filed Oct. 31, 1979, effective Feb. 11, 1980. Amended: Filed Sept. 9, 1985, effective Dec. 15, 1985. Rescinded and readopted: Filed Aug. 3, 1987, effective Nov. 23, 1987. Amended: Filed Feb. 16, 1999, effective July 30, 1999.

*Original authority 70.605, RSMo 1967, amended 1974, 1992.

16 CSR 20-4.020 Actuarial Assumptions— Police and Fire Employees

(Rescinded December 15, 1985)

AUTHORITY: section 70.605.14, RSMo 1969. Original rule filed Dec. 29, 1975, effective Jan. 8, 1976. Amended: Filed July 1, 1977, effective Oct. 13, 1977. Amended: Filed Oct. 31, 1979, effective Feb. 11, 1980. Rescinded: Filed Sept. 9, 1985, effective Dec. 15, 1985.